

STIC Search Report

STIC Database Tracking Number: 120874

TO: Andrea Ragonese Location: pk1 11e50

Art Unit: 3743

Case Serial Number: 10/613860

From: Jeanne Horrigan

Location: EIC 3700 CP2-2C08

Phone: 305-5934

jeanne.horrigan@uspto.gov

Search Notes

Attached are the search results for the chest tube search, including prior art searches in foreign and international patent databases; and medical and and general sci/tech non-patent literature databases.

Although I tagged the items that I thought were most relevant, I recommend that you review all of the results.

Also attached is a search feedback form. Completion of the form is voluntary. Your completing this form would help us improve our search services.

I hope the attached information is useful. Please feel free to contact me (phone 305-5934 or email jeanne.horrigan@uspto.gov) if you have any questions or need additional searching on this application.





Solomon, Terrance

From:

Unknown@Unknown.com

Sent:

Friday, April 30, 2004 4:00-PM

To:

STIC-EIC3700

Subject:

Generic form response

ResponseHeader=Commercial Database Search Request

120874

LogNumber=

Searcher=

SearcherPhone= ·

SearcherBranch=

MyDate=Fri Apr 30 15:59:50 GMT-0400 (Eastern Daylight Time) 2004

submitto=STIC-EIC3700@uspto.gov

Name=Andrea Ragonese

Empno=77465

Phone=703-306-4055

Artunit=3743

Office=PK1 - 11E50

Serialnum=10613860 / 1

PatClass=128/205.12 / 128/200.24

Earliest=7/3/2003

Format3=email

Searchtopic=Chest Tube Thoracic Emphysematous hyperinflated lungs

Oxygen Tube through Viscera of Lung / Implanable in Lung

Tracheotomy Tube '

Emergency Cricothyroidotomies

Transtracheal catheter

Comments=

send=SEND

APR 30 2004

Inventor = Don Tanaka - ca

Serial 10/613860 May 3, 2004

```
File 155:MEDLINE(R) 1966-2004/Apr W4
File 5:Biosis Previews(R) 1969-2004/Apr W4
File 73:EMBASE 1974-2004/Apr W4
File 34:SciSearch(R) Cited Ref Sci 1990-2004/Apr W4
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
File 144:Pascal 1973-2004/Apr W4
File 2:INSPEC 1969-2004/Apr W4
File 6:NTIS 1964-2004/May W1
File 8:Ei Compendex(R) 1970-2004/Apr W3
File 94:JICST-EPlus 1985-2004/Apr W2
File 95:TEME-Technology & Management 1989-2004/Apr W2
File 99:Wilson Appl. Sci & Tech Abs 1983-2004/Mar
File 65:Inside Conferences 1993-2004/Apr W4
File 35:Dissertation Abs Online 1861-2004/Apr
Set
        Items
               Description
               TUBE OR TUBES OR TUBING OR CONDUIT? ? OR TUBUL? OR CATHETE-
S1
      3927650
            R? ? OR PIPET??? OR DUCT? ? OR CANNULA? ? OR CHANNEL? ? OR PI-
            PE OR PIPES OR PIPING
               TRAP OR TRAPS OR CONTAINER? ? OR (CONTAINMENT OR DRAINAGE) -
S2
      408837
             () (VESSEL? ? OR DEVICE? ?)
      1550284 FILTER? ? OR FILTRATION OR VALVE? ?
S3
               CHEST OR THORACIC OR LUNG
S4
      2168788
      1299712 VISCERAL OR WALL OR WALLS
S5
               (PULMONARY OR LUNG OR OXYGEN OR 02) (1W) THERAPY
S6
        68156
               ATELECTASIS OR MIDDLE()LOBE()SYNDROME OR BRONCHIECTASIS OR
S7
        33974
            TRAPPED()AIR(2N)LUNG? ?
S8
           50
                DRAINAGE() COLLECTION
S9
      2240579
                OXYGEN OR O2
S10
        52006
                IMPLANTABLE
       430049
                COLLATERAL () VENTILATION OR AIRWAY () RESISTANCE OR EMPHYSEMA?
              OR HYPERINFLAT???(2N)LUNG? ? OR CRICOTHYROID? OR HYPOXIA OR -
             HYPOXEMI? ? OR HYPOXAEMI? ? OR COPD OR CHRONIC()OBSTRUCTIVE()-
             PULMONARY()DISEASE OR CHRONIC()LUNG()DISEASE OR CHRON...
         1573
               S1 AND S2 AND S3
S12
S13
           5
               S1 AND S8 AND S3
S14
         1578
               S12:S13
S15
           7
               S14 AND S4(S)S5
               RD (unique items)
           3
S16
           67
               S14 AND (S6 OR S9)
S17
            0
                S17 AND (S7 OR S11)
S18
                S14 AND (S7 OR S11) [not relevant]
S19
           2
            1
               S10 AND S17 [not relevant]
S20
            6
               S17 AND S4:S5
S21
               S21 NOT (S16 OR S19 OR S20)
           5
S22
               RD (unique items) [not relevant]
           5
S23
                S17 NOT (S16 OR S19 OR S20 OR S21)
S24
           61
                RD (unique items)
S25
           56
     1461402
                S6/TI, DE OR S9/TI, DE
S26
           42
                S25 AND S26
S27
                Sort S27/ALL/PY, A [not relevant]
S28
           42
               S25 NOT S27
S29
           14
               Sort S29/ALL/PY, A
S30
          14
        29763
S31
               S1 AND (S7 OR S11)
         750
               S31 AND S4 AND S5
S32
          283
               S4 (5N) S5 AND S31
S33
S34
         19
               S6 AND S33
```

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```
S35
          19
               S34 NOT (S16 OR S19 OR S20 OR S21 OR S17)
S36
          12
               RD (unique items)
$37
          12
               Sort S36/ALL/PY, A
               (S7/TI, DE OR S11/TI, DE) AND S33
S38
         150
S39
          32
               S38 AND S9
               S39 NOT (S16 OR S17 OR S19:S21 OR S34)
S40
          22
          16
S41
               RD (unique items)
S42
          16
               Sort S41/ALL/PY, A
S43
          2
              S14 AND S6
S44
         330
              S10()S1
S45
           0 S17 AND S44
S46
           0 S14 AND S44
       26942 COLLATERAL () VENTILATION OR AIRWAY () RESISTANCE
S47
               S47/TI, DE AND S14
S48
           0
S49
               S47 AND S14 [not relevant]
           1
```

16/7/3 (Item 3 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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12013954 PMID: 12234043

. Performance of advanced trauma life support procedures in microgravity.

Campbell Mark R; Billica Roger D; Johnston Smith L; Muller Matthew S

NASA Medical Operations, Johnson Space Center and Wyle Laboratories,
Houston, TX, USA. mcamp@lstarnet.com

Aviation, space, and environmental medicine (United States) Sep 2002,

73 (9) p907-12, ISSN 0095-6562 Journal Code: 7501714

Document type: Evaluation Studies; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

BACKGROUND: Medical operations on the International Space Station will emphasize the stabilization and transport of critically injured personnel and so will need to be capable of advanced trauma life support (ATLS). METHODS: We evaluated the ATLS invasive procedures in the microgravity environment of parabolic flight using a porcine animal model. Included in the procedures evaluated were artificial ventilation, intravenous infusion, laceration closure, tracheostomy, Foley catheter drainage, chest insertion, peritoneal lavage, and the use of telemedicine methods for procedural direction. RESULTS: Artificial ventilation was performed and appeared to be unaltered from the 1-G environment. Intravenous infusion, laceration closure, percutaneous dilational tracheostomy, and Foley catheter drainage were achieved without difficulty. Chest insertion and drainage were performed with no more difficulty than in the 1-G environment due to the ability to restrain patient, operator and supplies. A Heimlich valve and Sorenson drainage system were both used to tube drainage collection with minimal equipment, provide for chest without the risk of atmospheric contamination, and with the capability to auto-transfuse blood drained from a hemothorax. The use of telemedicine in tube insertion was demonstrated to be useful and feasible. Peritoneal lavage using a percutaneous technique, although requiring less training to perform, was found to be dangerous in weightlessness due to the additional pressure of the bowel on the anterior abdominal wall creating a high risk of bowel perforation. CONCLUSIONS: The performance of ATLS procedures in microgravity appears to be feasible with the exception of diagnostic peritoneal lavage. Minor modifications to equipment and techniques are required in microgravity to effect surgical drainage in the

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presence of altered fluid dynamics, to prevent atmospheric contamination, and to provide for the restraint requirements. A parabolic simulation system was developed for equipment and procedure verification, physiological research, and possible crew medical officer training in the future.

Record Date Created: 20020917
Record Date Completed: 20030131

30/6/5 (Item 5 from file: 94)

00534876 JICST ACCESSION NUMBER: 88A0061827 FILE SEGMENT: JICST-E Research and development of vacuum system for SSC., 1987

37/6/8 (Item 8 from file: 73) 10669909 EMBASE No: 2000153040

Mechanical ventilation

2000

37/6/9 (Item 9 from file: 5) 0012718017 BIOSIS NO.: 200000436330

Approach to the patient in respiratory distress 2000

37/6/11 (Item 11 from file: 155)

10751741 PMID: 10872135

Sleep-related breathing disorders following discharge from intensive care. Apr 2000

37/6/12 (Item 12 from file: 73) 12383638 EMBASE No: 2003508981

Acinar Arterial Changes with Chronic Lung Disease of Prematurity in the Surfactant Era

2003

37/9/1 (Item 1 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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05058917 PMID: 452276

[Transbronchial transthoracic sanation of chronic suppurative foci in the lungs]

Chrezbronkhial'naia transtorakal'naia sanatsiia khronicheskikh gnoinykh ochagov v legkikh.

Pleshakov V T; Kartavenko A I; Vorontsov S A; Shalaev S A; Kostin E D Vestnik khirurgii imeni I. I. Grekova (USSR) May 1979, 122 (5) p7-11 ISSN 0042-4625 Journal Code: 0411377

Document type: Case Reports; Journal Article; English Abstract

Languages: RUSSIAN

Main Citation Owner: NLM Record type: Completed Subfile: INDEX MEDICUS

A new method of bronchial sanitation consisting in conducting a polyurethane tube through the pulmonary tissue and thoracic wall outward under the bronchoscopy control is suggested. The method has been used successfully in 22 patients.

Tags: Female; Human

Descriptors: **Bronchiectasis** --therapy--TH; *Drainage--methods--MT; *Irrigation--methods--MT; * **Lung** Abscess-- **therapy** --TH; *Pneumonia --therapy--TH; Adult; Bronchi; Bronchoscopes; Drainage--instrumentation--IS

; Irrigation -- instrumentation -- IS; Thorax Record Date Created: 19790816 Record Date Completed: 19790816 37/9/4 (Item 4 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0008990599 BIOSIS NO.: 199497011884 The effects of transtracheal gas delivery on central inspiratory neuromuscular drive AUTHOR: Scott Graham C; Hinson James M; Scott Riley P; Quigley Patrick R; Christopher Kent L; Metzler Michael AUTHOR ADDRESS: Div. Pulm., Critical Care Environ. Med., Dep. Surgery, Univ. Missouri-Columbia, Inst. Transtracheal Oxygen Ther., Denver, CO, JOURNAL: Chest 104 (4): p1199-1202 1993 1993 ISSN: 0012-3692 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English ABSTRACT: Previous studies have shown transtracheal delivery of low-flow oxygen (TTO) decreases inspired minute ventilation (VEinsp) and have postulated that this would result in a decrease in the work of breathing (WOB). We hypothesized that a fall in central inspiratory neuromuscular drive (CIND) with TTO would reflect a fall in WOB. We measured resting ventilatory parameters (RVP) and CIND by the mouth occlusion pressure technique (MOP) at different gas flow rates through the catheter in 21 subjects (13 men, 8 women; mean age, 60 +- 10.6 years) with severe COPD with a mature intratracheal oxygen catheter (ITOC). We also constructed a lung / chest wall analog (LCA) to determine if flow through the catheter would alter pressure changes during inspiration. Inspiratory tidal volume (V-Tinsp) and minute ventilation (V-Einsp) decreased proportionally to the gas flow rate through the catheter . However, with increasing flow through the catheter0 , P0.1 increased in the LCA, presumably due to the Bernoulli effect. The lack of a similar change in the subject group suggests that CIND does, in fact, fall, and that possibly there is a decrease in WOB. This effect may be of benefit to patients with severe COPD . REGISTRY NUMBERS: 7782-44-7: OXYGEN **DESCRIPTORS:** MAJOR CONCEPTS: Metabolism; Muscular System--Movement and Support; Nervous System -- Neural Coordination; Pulmonary Medicine -- Human Medicine, Medical Sciences; Respiratory System -- Respiration BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia ORGANISMS: human (Hominidae) COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates CHEMICALS & BIOCHEMICALS: OXYGEN MISCELLANEOUS TERMS: CHRONIC OBSTRUCTIVE PULMONARY OXYGEN THERAPY ; WORK OF BREATHING REDUCTION CONCEPT CODES: 10012 Biochemistry - Gases 12512 Pathology - Therapy

13003 Metabolism - Energy and respiratory metabolism

16001 Respiratory system - General and methods

16004 Respiratory system - Physiology and biochemistry

16006 Respiratory system - Pathology

17504 Muscle - Physiology and biochemistry

20504 Nervous system - Physiology and biochemistry

22100 Routes of immunization, infection and therapy BIOSYSTEMATIC CODES:

86215 Hominidae

37/9/5 (Item 5 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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12874763 PMID: 8537988

Incentive spirometry for tracheostomy and laryngectomy patients.

Tan A K

Jewish General Hospital, McGill University Faculty of Medicine, Montreal, Quebec.

Journal of otolaryngology (CANADA) Oct 1995, 24 (5) p292-4, ISSN 0381-6605 Journal Code: 7610513

Document type: Clinical Trial; Journal Article; Randomized Controlled Trial

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed Subfile: INDEX MEDICUS

Sustained maximal inspiration (incentive spirometry) is used for the prevention and management of atelectasis in major abdominal and thoracic surgery. Patients with head and neck surgery are predisposed to postoperative disturbances in lung function after extensive surgical resection, immobilization, or significant chest wall deformity from various reconstructive procedures. The patient often requires tracheostomy or permanent laryngeal stoma. A prospective clinical study on patients with major head and neck surgery was conducted to evaluate the use of incentive spirometry to improve postoperative lung function. An adaptor was first designed to allow patients with tracheostomy tubes to use the spirometers. Parameters studied include vital signs, arterial blood gases (A-a gradient), and pulmonary function test. Significant improvement of lung function and lack of complication warrant the use of incentive spirometry in postoperative head and neck surgery patients.

Tags: Female; Human; Male

Descriptors: *Breathing Exercises; *Laryngectomy--rehabilitation--RH; *Spirometry; *Tracheostomy--rehabilitation--RH; Abdomen--surgery--SU; Aged; *Atelectasis --prevention and control--PC; Atelectasis --therapy--TH; Equipment Design; Heart Rate; Inhalation; Laryngectomy--instrumentation--IS; Lung--physiopathology--PP; Lung Diseases--prevention and control--PC; Lung Diseases-- therapy --TH; Otorhinolaryngologic Diseases--surgery--SU; Oxygen--blood--BL; Postoperative Complications; Prospective Studies; Respiration; Spirometry--instrumentation--IS; Thoracic Surgery --rehabilitation--RH; Tracheostomy--instrumentation--IS; Vital Capacity CAS Registry No.: 7782-44-7 (Oxygen)

Record Date Created: 19960208
Record Date Completed: 19960208

37/9/6 (Item 6 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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13691501 PMID: 9390881

Long-term noninvasive ventilation for patients with thoracic cage abnormalities.

Leger P

Association Lyonaise contra la Poliomyelite, Home Respiratory Care Organization, Croix Rousse Hospital, Lyon, France.

Respiratory care clinics of North America (UNITED STATES) Jun 1996, 2 (2) p241-52, ISSN 1078-5337 Journal Code: 9612026

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed Subfile: INDEX MEDICUS

noninvasive ventilation the offers Long-term patient thoracovertebral deformities, including deformities that result from the severe skeletal and chest -wall sequelae of tuberculosis, what long-term oxygen therapy has offered patients with chronic obstructive pulmonary disease: improved survival and prevention or alleviation of cor pulmonale. Long-term noninvasive intermittent positive pressure ventilation, particularly nocturnal use, has little inconvenience, because ventilation during the night often suffices. Major advantages include correction of hypoventilation during autonomous breathing time that is usually sufficient to permit patients to resume their activities of daily living without need for ventilatory assistance during the day and efficacy comparable to that of intermittent positive pressure ventilation via an indwelling tracheostomy tube, without the inconveniences (tracheostomy is always available if necessary). (36 Refs.)

Tags: Human

Descriptors: *Hypoventilation--therapy--TH; *Lung Diseases, Obstructive --therapy--TH; *Respiration, Artificial--methods--MT; *Spinal Diseases --therapy--TH; *Thoracic Vertebrae; Hypoventilation--etiology--ET; Hypoventilation--physiopathology--PP; Lung Diseases, Obstructive--etiology Lung Diseases, Obstructive--physiopathology--PP; Postoperative Complications; Respiration, Artificial--instrumentation--IS; Scoliosis --complications--CO; Scoliosis--congenital--CN; --complications--CO; Spinal Diseases--etiolog Spinal Diseases Diseases--etiology--ET; Tuberculosis --complications--CO; Tuberculosis--surgery--SU Record Date Created: 19971223 Record Date Completed: 19971223

37/9/7 (Item 7 from file: 73)

DIALOG(R) File 73: EMBASE

(c) 2004 Elsevier Science B.V. All rts. reserv.

07662374 EMBASE No: 1999150620

Continuous flow apnoeic ventilation via intratracheal oxygen insufflation APNOISCHE VENTILATION INFOLGE INTRATRACHEALER Oinf 2-INSUFFLATION ALS PROBATE INTERVENTION BEI SCHWERGRADIGER COPD

Osseiran K.; Schonhofer B.; Kohler D.

Dr. K. Osseiran, Krankenhaus Kloster Grafschaft, Ztr. Pneumol.

Beatmungs/Schlafmed., Annostr. 1, D-57392 Schmallenberg-Grafschaft Germany

Medizinische Klinik (MED. KLIN.) (Germany) 15 APR 1999, 94/SPEC. ISS. 1 (55-57)

CODEN: MEKLA ISSN: 0723-5003

DOCUMENT TYPE: Journal; Conference Paper

LANGUAGE: GERMAN SUMMARY LANGUAGE: ENGLISH; GERMAN

NUMBER OF REFERENCES: 12

Background: In patients with disturbed gas-exchange (e. g. COPD) intratracheal oxygen insufflation (ITOinf 2) improves oxygenation and reduces the minute ventilation. We use a bronchoscopic technique of intratracheal catheter placement in unintubated patients. In a patient with a pink-puffer emphysema after endoscopical insertion of the catheter ITOinf 2 induced a 'continuous flow apnoeic ventilation' (CFAV). Case Report: A patient (female, 58 years) with a pink-puffer emphysema was admitted to the ICU with acute on chronic respiratory failure due to acute laryngitis. Because of laryngitis associated upper airway obstruction a non-invasive mechanical ventilation could not be performed. The ensuing high flow ITOinf 2 (10 1/min) induced a CFAV characterized by no chest wall movement and adequate ventilation as reflected by stable, elevated PaCOinf 2 (between 118 and 125 mm Hg), which could be maintained for 4 hours. After an ensuing short-term invasive mechanical ventilation and the administration of high dose glucocorticoids the patient was successfully extubated and the clinical status improved continuously. Conclusion: In a patient with an acute on chronic respiratory failure due to end-stage emphysema ITOinf 2 induced CFAV and stabilized the clinical status. Especially in patients with end-stage emphysema , who are likely to be difficult to be weaned from the respirator ITOinf 2 may be a feasable technique in order to bridge an emergency situation. MEDICAL DESCRIPTORS: *chronic obstructive lung disease--diagnosis--di; *chronic obstructive lung disease-- therapy --th; * oxygen therapy lung gas exchange; bronchoscopy; catheterization; emphysema --diagnosis --di; emphysema --therapy--th; forced expiratory volume; human; female; case report; human tissue; human cell; adult; conference paper SECTION HEADINGS: 009 Surgery 015 Chest Diseases, Thoracic Surgery and Tuberculosis 024 Anesthesiology 42/6/1 (Item 1 from file: 6) 1278375 NTIS Accession Number: AD-A955 147/4 Effect of Hypoxia on the Pulmonary Microcirculation (Rept. no. 1 (Annual) 1 Oct 67-30 sep 68) 30 Sep 68 42/6/2 (Item 2 from file: 73) 01032284 EMBASE No: 1978160622 Collateral ventilation 1977 42/6/9 (Item 9 from file: 73) EMBASE No: 1997196547

1997

42/6/14 (Item 14 from file: 144) 16011565 PASCAL No.: 03-0157218

reduction surgery

Pneumomediastinum and subcutaneous emphysema during carbon dioxide laser laparoscopy for tuboplasty 2002

No-cut thoracoscopic lung plication: A new technique for lung volume

42/6/16 (Item 16 from file: 155)

Serial 10/613860 May 3, 2004

12320127 PMID: 12682483

Alveolar inflation during generation of a quasi-static pressure/volume curve in the acutely injured lung.

Apr 2003

43/6/1 (Item 1 from file: 155)

04596949 PMID: 897194

A vena cava filter using thermal shape memory alloy. Experimental aspects.

Oct 1977

43/6/2 (Item 1 from file: 73) 10586054 EMBASE No: 2000051296

Vena cava filters : Expanding indications and practices

2000

ASRC Searcher: Jeanne Horrigan Serial 10/613860 May 3, 2004 File 98:General Sci Abs/Full-Text 1984-2004/Apr 9:Business & Industry(R) Jul/1994-2004/Apr 30 File 16:Gale Group PROMT(R) 1990-2004/May 03 File 160:Gale Group PROMT(R) 1972-1989 File 148:Gale Group Trade & Industry DB 1976-2004/May 03 File 621:Gale Group New Prod.Annou.(R) 1985-2004/Apr 30 File 149:TGG Health&Wellness DB(SM) 1976-2004/Apr W4 File 441:ESPICOM Pharm&Med DEVICE NEWS 2004/Apr W4. File 636:Gale Group Newsletter DB(TM) 1987-2004/May 03 File 369:New Scientist 1994-2004/Apr W4 File 370:Science 1996-1999/Jul W3 Items Description Set TUBE OR TUBES OR TUBING OR CONDUIT? ? OR TUBUL? OR CATHETE-S1 2243376 R? ? OR PIPET??? OR DUCT? ? OR CANNULA? ? OR CHANNEL? ? OR PI-PE OR PIPES OR PIPING TRAP OR TRAPS OR CONTAINER? ? OR (CONTAINMENT OR DRAINAGE) -S2 471420 () (VESSEL? ? OR DEVICE? ?) FILTER? ? OR FILTRATION OR VALVE? ? S3 436240 S4 204251 CHEST OR THORACIC OR LUNG S5 875444 VISCERAL OR WALL OR WALLS S6 3262 (PULMONARY OR LUNG OR OXYGEN OR 02) (1W) THERAPY S7 3007 ATELECTASIS OR MIDDLE()LOBE()SYNDROME OR BRONCHIECTASIS OR TRAPPED()AIR(2N)LUNG? ? S8 38 DRAINAGE () COLLECTION S9 174024 OXYGEN OR O2 S10 20692 IMPLANTABLE 32542 COLLATERAL() VENTILATION OR AIRWAY() RESISTANCE OR EMPHYSEMA? S11 OR HYPERINFLAT???(2N)LUNG? ? OR CRICOTHYROID? OR HYPOXIA OR -HYPOXEMI? ? OR HYPOXAEMI? ? OR COPD OR CHRONIC()OBSTRUCTIVE()-PULMONARY() DISEASE OR CHRONIC() LUNG() DISEASE OR CHRON... S1(S)(S2 OR S8)(S)S3 1085 S12 S4(S)S12 S13 11 0 S6(S)S12 S14 S6/TI,DE AND S12 0 S15 26 S9(S)S12 S16 S17 0 (S7 OR S11)(S)S12 S18 35 S13 OR S16 33 RD (unique items) S19 33 Sort S19/ALL/PD, A **S20** 20/3,AB,K/19 (Item 19 from file: 149) DIALOG(R) File 149:TGG Health & Wellness DB(SM) (c) 2004 The Gale Group. All rts. reserv. SUPPLIER NUMBER: 19831803 (USE FORMAT 7 OR 9 FOR FULL TEXT) Treatment of spontaneous pneumothorax: a more aggressive approach? Baumann, Michael H.; Strange, Charlie Chest, v112, n3, p789(16) Sep, 1997 PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

Once placed, a chest tube is usually connected to a drainage device if the lung fails to reexpand or an air leak persists. The same resistance considerations in choosing chest tube size need to be applied to the connecting tubing and the drainage device.

LINE COUNT: 01003

WORD COUNT:

11896

ASRC Searcher: Jeanne Horrigan Serial 10/613860

May 3, 2004

(52,53,61,62) Four drainage devices in common use were reviewed in 1985 and 1988 regarding their accommodation of various air...
...of suction from -20 to -40 cm (H.sub.2)O did not significantly vary chest tube air flow. (53) Improper alignment of any valve system can also cause increased resistance. (63)

Should suction be applied to the chest tube...

20/3,AB,K/30 (Item 30 from file: 149)

DIALOG(R) File 149:TGG Health&Wellness DB(SM)

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02078551 SUPPLIER NUMBER: 86052469 (USE FORMAT 7 OR 9 FOR FULL TEXT)

A guide to mobile chest drains: mobile chest drains allow patients to move independently--reducing the complications of immobility--and head home sooner. Here are four such devices and tips on managing the patients who have them.

Carroll, Patricia

RN, 65, 5, 56(6)

May, 2002

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0033-7021 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional WORD COUNT: 2848 LINE COUNT: 00224

... the device is taped to the chest, to reduce the risk of dislodgement.

The Heimlich valve is convenient to use because it attaches to a standard chest tube that would otherwise be connected to a full-sized chest drainage device. A patient can thus be stepped down from a traditional chest drain to a Heimlich valve, making it easier for him to walk around. This can be particularly helpful for patients...

20/3, AB, K/33 (Item 33 from file: 149)

DIALOG(R) File 149:TGG Health & Wellness DB(SM)

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2343711 SUPPLIER NUMBER: 113852566 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Lung volume reduction surgery in canine model of predominantly upper lobe
emphysema *: advantages of new Surgical System.(laboratory & animal
investigations)

Mink, Steven N.; Gonzalez, Xavier; Duke, Krika; Bautista, Edgar; Tan, Lawrence

Chest, 125, 2, 633(11)

Feb, 2004

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional WORD COUNT: 7362 LINE COUNT: 00624

... was placed in the right hemithorax and the chest incision was closed in planes.

The chest tube was connected to a Heimlich valve, and the valve was connected to a vacuum water- trap system. Air leaks were evaluated for approximately 30 to 200 min, and the presence or absence of air leaks was documented. When no bubbles were observed, the water- trap system was disconnected, and the chest tube was removed. The animals remained on oxygen support until they maintained adequate oxygenation and ventilation on their own. When considered stable, the...

...12 mm (n = 1) diameter to reduce 25 to 50% of the lobe mass.

After lung volume reduction was completed, evaluation of perioperative air leaks was performed. With the <code>chest</code> filled with warm saline, no air leaks were observed from all the implant sites or

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neighboring nonreduced lung tissue. Evaluation of postoperative air leaks was subsequently determined by attachment of a chest tube to a Heimlich valve connected to a water-trap system. After thorax evacuation, no air leaks were observed in six animals of the surgical...
...in only one animal, a small intermittent leak was observed. This bubbling stopped prior to chest tube removal. In all dogs, chest tubes were removed 1 to 4 h after surgery. All dogs recovered without problems from surgery...

```
File 155:MEDLINE(R) 1966-2004/Apr W4
       Items
               Description
S1
               AU='SIROKMAN F':AU='SIROKMAN W A' [not relevant]
          12
S2
         101 COLLATERAL () VENTILATION
S3
       68773 BYPASS
S4
           0 S2()S3
S5
           3
              S2 AND S3
S6
        9858 TRAP
S7
           0 S3()S6
S8
              THERAPY/DE
     1835809
S9
           6 S2 AND S8
S10
           6 S9 NOT S5
               LONG () TERM (1W) OXYGEN () THERAPY
S11
         542
S12
               S2 AND S11
           0
S13
       70046 HYPERINFLAT? (3N) LUNG? ? OR HYPOXIA OR HYPOXEMIC OR EMPHYSE-
            MA? OR CHRONIC()(LUNG OR OBSTRUCTIVE()PULMONARY)()DISEASE? ?
S14
         267 S11 AND S13
      215786 TRAP? ? OR VESSEL? ? OR CONTAINER? ? OR CONTAINMENT
S15
      158348 TUBE OR TUBES OR CONDUIT? ? OR CATHETER? ?
S16
               S14 AND S15 AND S16
S17
           2 S17 NOT (S5 OR S9)
S18
S19
           1 S2 AND S15 AND S16
           0 S19 NOT (S5 OR S9 OR S18)
S20
5/9/2
DIALOG(R) File 155:MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.
          PMID: 759233
04942554
  Collateral ventilation .
 Menkes H; Traystman R; Terry P
 Federation proceedings (UNITED STATES) Jan 1979, 38 (1) p22-6,
ISSN 0014-9446 Journal Code: 0372771
 Document type: Journal Article
 Languages: ENGLISH
 Main Citation Owner: NLM
 Record type: Completed
 Subfile: INDEX MEDICUS
```

Ventilation may bypass obstructed airways through collateral channels, including interalveolar pores of Kohn, bronchiole-alveolar communications of Lambert, and interbronchiolar pathways of Martin. Resistance through these channels, like resistance through small airways, increases with decreasing lung volume and with hypocapnia. But whereas the distention of collateral channels and small airways by a variety of factors is similar, the efficiency of ventilation through collateral channels is less than the efficiency through airways. Gas inspired through collateral channels is contaminated with alveolar gas from surrounding lung so that the dead space collateral ventilation is increased. When one part of the lung ventilates out of phase with the surrounding lung, pulmonary interdependence promotes more homogeneous ventilation. In the presence of airways obstruction, interdependence may be a primary factor governing the rate of collateral ventilation . In man, collateral ventilation is unimportant in normal lungs. However, with disease, it may be critical in producing or compensating for abnormalities. For example, the long time constant for collateral ventilation in the middle lobe may be responsible for atelectasis, which results in the middle lobe syndrome. On the other hand, the short time constant for collateral ventilation in

emphysema may be essential for the distribution of ventilation beyond obstructed airways.

Tags: Human; Support, U.S. Gov't, P.H.S.

Descriptors: *Lung--anatomy and histology--AH; *Pulmonary Ventilation; Airway Resistance; Animals; Bronchi--anatomy and histology--AH; Carbon Dioxide--physiology--PH; Dogs; Elasticity; Lung--physiology--PH; Lung Compliance; Pulmonary Alveoli--anatomy and histology--AH; Pulmonary Diffusing Capacity

CAS Registry No.: 124-38-9 (Carbon Dioxide)

Record Date Created: 19790313
Record Date Completed: 19790313

5/9/3

DIALOG(R) File 155: MEDLINE(R)

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04655988 PMID: 618444

Collateral ventilation in man.

Terry P B; Traystman R J; Newball H H; Batra G; Menkes H A

New England journal of medicine (UNITED STATES) Jan 5 1978, 298 (1) pl0-5, ISSN 0028-4793 Journal Code: 0255562

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

Subfile: AIM; INDEX MEDICUS

(defined as the determine whether collateral ventilation ventilation of alveolar structures through passages or channels that bypass the normal airways) changes with age or emphysema, we compared the mechanics of collateral ventilation in seven young normal subjects, three old normal subjects and five patients with emphysema. In supine normal subjects at the end of a quiet expiration, resistance to airflow was greater through collateral channels than through bronchi and bronchioles. In emphysema, airways resistance could exceed collateral resistance, causing air to flow preferentially through collateral pathways. We conclude that high collateral resistance minimizes collateral airflow in supine normal subjects. When peripheral airways become obstructed or obliterated in emphysema, collateral channels may provide for more even distribution of ventilation.

Tags: Female; Human; Male; Support, U.S. Gov't, P.H.S.

Descriptors: *Pulmonary Alveoli--physiology--PH; *Pulmonary Emphysema --physiopathology--PP; *Respiration; Adult; Aging; Airway Resistance; Lung --physiology--PH; Middle Aged; Pulmonary Ventilation

Record Date Created: 19780127
Record Date Completed: 19780127

10/9/1

DIALOG(R) File 155: MEDLINE(R)

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13118822 PMID: 8784730

Atypical manifestations of pulmonary atelectasis.

Gurney J W

Department of Radiology, University of Nebraska Medical Center, Omaha 68198-1045, USA.

Journal of thoracic imaging (UNITED STATES) Summer 1996, 11 (3) p165-75, ISSN 0883-5993 Journal Code: 8606160

Document type: Journal Article; Review; Review, Tutorial

Serial 10/613860 May 3, 2004

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Recognizing atelectasis has always been a challenge. Atypical patterns further our knowledge of this subject. The lung has two mechanisms to help keep the lobes inflated: collateral ventilation and trapped nitrogen both tend to inflate the lungs when the airways are obstructed. Peripheral upper-lobe atelectasis resembles apical pleural fluid. Instead of collapsing superomedially, the upper lobe collapses posterolaterally, marginated by either the middle lobe or the superior segment of the lower lobe. This pattern may also be produced by segmental atelectasis of the apical-posterior segments of the upper lobe. Combined right-upper- and middle-lobe atelectasis usually stems from malignancy and violates Felson's lesion sign. Upper-lobe atelectasis may produce a localized pneumothorax (pneumothorax ex vacuo), analogous to the vacuum joint phenomenon. Conversely, a large pneumothorax may cause torsion of an upper-lobe bronchus, leading to atelectasis. It is important to distinguish these two conditions in order to choose the appropriate treatment-bronchoscopy in the former and chest tube drainage in the latter. Round atelectasis is a form of peripheral atelectasis that is variable in size and is thought to occur either when the lung collapses around a cleft in the presence of a pleural effusion or when shrinkage of a pleural scar pinches the adjacent lung. Round atelectasis has many features of plate atelectasis and may represent a special form of this condition. (41 Refs.)

Tags: Human

Descriptors: *Atelectasis--etiology--ET; Atelectasis--radiography--RA; Atelectasis-- therapy --TH; Bronchoscopy; Child; Lung--radiography--RA; Radiography, Thoracic; Tomography, X-Ray Computed--methods--MT

Record Date Created: 19961112
Record Date Completed: 19961112

10/9/2

DIALOG(R) File 155:MEDLINE(R)

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11894338 PMID: 12088549

Positive pressure techniques for airway clearance.

Fink James B

Respiratory Science, Aerogen Incorporated, Mountain View, California 94043, USA. jfink@aerogen.com

Respiratory care (United States) Jul 2002, 47 (7) p786-96, ISSN 0020-1324 Journal Code: 7510357

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed Subfile: INDEX MEDICUS

Positive airway pressure (PAP) has been used since the 1930s to improve oxygenation, increase lung volumes and reduce venous return. More recently, PAP has been identified as an effective method of splinting airway during expiration, improving collateral ventilation, increasing response to inhaled bronchodilators, and aiding secretion clearance in patients with cystic fibrosis and chronic bronchitis. A range of devices, administration techniques, and evidence supporting their clinical use is explored, suggesting that PAP is equivalent to postural drainage in the clearance of secretions. PAP produced by threshold and fixed orifice resistors generate

different characteristic flow, and airway and esophageal pressure patterns that may contribute to different physiologic effects. Further clinical studies are required to better understand the effects of these differences. (38 Refs.)

Tags: Human

Descriptors: *Positive-Pressure Respiration; Aerosols--administration and dosage--AD; Bronchitis, Chronic-- therapy --TH; Cystic Fibrosis-- therapy --TH; Pulmonary Ventilation; Respiratory Therapy --instrumentation--IS

CAS Registry No.: 0 (Aerosols)
Record Date Created: 20020628
Record Date Completed: 20020906

10/9/3

DIALOG(R) File 155: MEDLINE(R)

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11777695 PMID: 11962175

"Spare the cough, spoil the airway: back to the basics in airway clearance.

Donahue Michael

Children's Hospital of Philadelphia, Philadelphia, PA, USA.

Pediatric nursing (United States) Mar-Apr 2002, 28 (2) p107-11,

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Subfile: NURSING

Cough is the natural defense mechanism for protection of the respiratory tract. It is used to mobilize and remove secretions from the respiratory tree, moving them from the peripheral to the central airways. Effective airway clearance for individuals with cystic fibrosis is an essential component of daily therapy because of the thick and tenacious secretions that accumulate in their airways. Regardless of the airway clearance method used, effective coughing is the key part of the process. Understanding airway physiology and utilizing the equal pressure point and the collateral ventilation system between airways will make airway clearance activities most effective. Finding a match between an effective airway clearance method that uses cough effectively and a patient's preference is the challenge for the care provider. (12 Refs.)

Tags: Female; Human; Male

Descriptors: Airway Obstruction-- therapy --TH; *Cough--physiopathology --PP; *Cystic Fibrosis-- therapy --TH; *Drainage, Postural--methods--MT; *Positive-Pressure Respiration--instrumentation--IS; *Respiratory Therapy --instrumentation--IS; Airway Obstruction--etiology--ET; Airway Resistance; Bronchi--secretion--SE; Child; Child, Preschool; Cystic Fibrosis --complications--CO; Cystic Fibrosis--nursing--NU; Drainage, Postural --instrumentation--IS; Mucociliary Clearance--physiology--PH; Pediatric Nursing--methods--MT; Positive-Pressure Respiration--methods--MT; Prognosis; Pulmonary Ventilation; Respiratory Therapy --methods--MT; Severity of Illness Index; Treatment Outcome

Record Date Created: 20020418
Record Date Completed: 20020802

10/9/4

DIALOG(R) File 155: MEDLINE(R)

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07536041 PMID: 3623806

Right middle lobe syndrome in children.

Livingston G L; Holinger L D; Luck S R

International journal of pediatric otorhinolaryngology (NETHERLANDS) Jun 1987, 13 (1) p11-23, ISSN 0165-5876 Journal Code: 8003603

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Right middle lobe syndrome (RMLS) is characterized by a spectrum of diseases from recurrent atelectasis and pneumonitis to bronchiectasis of the middle lobe. It has been described among all age groups, although the diagnosis in pediatrics may be delayed or missed because of non-specific symptoms or findings. Twenty-one children with RMLS were evaluated during the past 10 years with particular attention to the history, bronchoscopic and pathologic findings. Most of these patients had asthma or a family history of atopic disorders; 3 patients had a family history of RMLS. Only two of the 21 patients had sufficient obstruction on bronchoscopy to account for their disease. Four had evidence of concomitant laryngeal pathology. The various theories of pathogenesis are discussed. In this series, the non-obstructive (impaired collateral ventilation) theory appeared to be most plausible. Bronchoscopy was performed in all instances to rule out obstruction due to foreign body or tumor. It was therapeutic in two-thirds of the cases. Resolution occurred promptly in one-third, and eventually in another third. Of the remaining patients, 4 required lobectomy and were cured; two have decreased but persistent symptoms. An aggressive medical management following bronchoscopy is warranted in all cases, especially when there is a possibility of asthma.

Tags: Female; Human; Male

Descriptors: *Middle Lobe Syndrome; Asthma--complications--CO; Asthma--therapy --TH; Atelectasis--complications--CO; Atelectasis--therapy --TH; Bronchiectasis--complications--CO; Bronchiectasis--therapy --TH; Bronchoscopy; Child; Child, Preschool; Infant; Middle Lobe Syndrome--diagnosis--DI; Middle Lobe Syndrome--therapy --TH; Retrospective Studies

Record Date Created: 19871007
Record Date Completed: 19871007

10/9/5

DIALOG(R) File 155:MEDLINE(R)

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06161867 PMID: 6344820

Middle lobe syndrome.

Wagner R B; Johnston M R

Annals of thoracic surgery (UNITED STATES) Jun 1983, 35 (6) p679-86,

ISSN 0003-4975 Journal Code: 15030100R Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

Subfile: AIM; INDEX MEDICUS

A review of the major literature dealing with the middle lobe syndrome shows that benign inflammatory disease is the most common etiological factor (62%), with bronchiectasis responsible for at least a quarter of the patients in these series. Early workers indicated that carcinoma rarely

ASRC Searcher: Jeanne Horrigan Serial 10/613860

May 3, 2004

originates in the right middle lobe; however, 22% of patients reviewed had malignant tumors as a cause of the syndrome. The original view that bronchial compression was the pathophysiological abnormality leading to development of the syndrome has been rejected by more recent authors. The focus has now turned to the relative isolation of the middle lobe, especially when a complete minor fissure is present. This isolation prevents the aerating effects of collateral ventilation of the upper lobe from reaching the middle lobe and thus impairs the clearing of secretions from the middle lobe bronchus. Bronchoscopy and bronchography are vital in the rational approach to this syndrome. Severe stenosis of the bronchus or tumor can be seen endoscopically in about 40% of patients, and bronchography will demonstrate an anatomical abnormality more than 70% of the time. Both the surgical and the medical approaches to therapy have been endorsed strongly by various authors in the 30 years since the syndrome was described. It now appears that bronchoscopy and, if need be, bronchography should be undertaken to rule out an endobronchial lesion. Timing of these studies will depend on the patient's age, with early examination advocated for the older patient at high risk for lung cancer. If there is reasonable evidence that the process is benign, medical management should be attempted. Lobectomy is performed if malignancy is suspected or if medical therapy fails. (71 Refs.)

Tags: Female; Human; Male

Descriptors: *Middle Lobe Syndrome; Child, Preschool; Infant; Lung --radiography--RA; Middle Lobe Syndrome--diagnosis--DI; Middle Lobe Syndrome--pathology--PA; Middle Lobe Syndrome--physiopathology--PP; Middle Lobe Syndrome-- therapy --TH

Record Date Created: 19830708
Record Date Completed: 19830708

18/9/1

DIALOG(R) File 155:MEDLINE(R)

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08586713 PMID: 2114622

[Acute and long-term effects of chronic obstructive lung diseases]

Sauerstoffakut- und -langzeitwirkung bei chronisch-obstruktiven Lungenerkrankungen.

Klein G; Matthys H

Fachbereich Pneumologie, Deutsche Klinik fur Diagnostik Wiesbaden.

Pneumologie (Stuttgart, Germany) (GERMANY, WEST) Feb 1990, 44 Suppl 1 p188-90, ISSN 0934-8387 Journal Code: 8906641

Document type: Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM Record type: Completed Subfile: INDEX MEDICUS

In patients with **chronic obstructive pulmonary diseases** and cor pulmonale, long-term treatment with oxygen leads to a reduction in pulmonary arterial pressure. The aim of this study was investigate the question as to the extent to which pulmonary arterial pressure reduction in response to acute administration of oxygen differed from the long-term effect of oxygen treatment, and whether it was possible to determine prognostic factors that would identify the patients who would obtain particular benefit from long - term oxygen therapy. Twenty patients suffering from severe obstruction, global respiratory failure and precapillary hypertension, were treated with oxygen for a period of 20 +/-6 months. At the beginning of the treatment, the acute oxygen-induced

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reversibility of pulmonary hypertension with an FIO2 of 80% was established. After an average of 20 months, catheter examination was repeated. A comparison was made between reversibility with acute oxygen and the long-term effects of oxygen. Long-term treatment with oxygen led to a reduction in pulmonary arterial pressure (18%), which was comparable to the reversibility established for acute oxygen inspiration (20%). While, over the long-term, a reduction in pulmonary arterial pressure was caused solely by a drop in pulmonary vessel resistance, acute application of oxygen resulted in an approximately equal decrease in pulmonary vessel cardiac resistance output. The more pronounced the pulmonary and hypertension prior to treatment the greater the pressure reduction achieved with long-term oxygen treatment. Patients with a particularly marked acute oxygen reversibility also had greater long-term benefit, in the sense that, in these cases, the decrease in pulmonary arterial pressure was more substantial than in patients with smaller acute reversibility.

Tags: Human

Descriptors: *Hypertension, Pulmonary--therapy--TH; *Lung Diseases, Obstructive--therapy--TH; *Oxygen Inhalation Therapy--methods--MT; Arrhythmia--therapy--TH; Forced Expiratory Volume; Hematocrit; Long-Term Care

Record Date Created: 19900814
Record Date Completed: 19900814

18/9/2

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

04700672 PMID: 622539

Indications and costs of long - term oxygen therapy]
Indikationen und Kosten der Sauerstoff-Langzeitbehandlung.
Scherrer M

Schweizerische medizinische Wochenschrift (SWITZERLAND) Jan 28 1978,

108 (4) p110-3, ISSN 0036-7672 Journal Code: 0404401

Document type: Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM Record type: Completed Subfile: INDEX MEDICUS

Nowadays, domiciliary long-term O2 therapy is given to certain patients with chronic arterial hypoxemia (PaO2 less than 55 mm Hg). However, it is important to exclude cases with severe CO2 retention (PaCO2 greater than 55 Hypoxemic and only slightly hypercapnic patients chiefly suffer from COLD and sometimes from a severe restrictive ventilatory disorder such as chronic bilateral pleural effusions or advanced kyphoscoliosis. The most important precondition for long-term O2 therapy is correct adjustment of all other procedures of pulmonary treatment, as well as total abstention from smoking. Common sources for domiciliary O2 therapy are bottles delivered to the patient's home weekly by the O2-producing firm. A new which appears to offer for greater facilities is the O2 concentrator of Rimer-Birlec (Cardiff, Wales). 2 liters O2/min are given via a naso-pharyngeal tube for 15 h per day. Without 02 during 9 h per day, the patient is able to follow appropriate employment. In domiciliary long-term O2 therapy the cost of O2 supply by the O2 concentrator is half that of bottles delivered to the home weekly. The new O2 concentrator for domiciliary long-term O2 therapy is recommended as by far the most economical source of O2. Other sources of O2 such as liquid O2 or chemically produced O2 are uneconomical for domiciliary use. Only hospitals

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will benefit from supplying their pipelines from a container with liquid oxygen instead of using gaseous O2 from bottles. The cost of the former is 3/4 that of the latter.

Tags: Human

Descriptors: *Anoxemia--therapy--TH; *Bronchial Spasm--complications--CO; *Oxygen Inhalation Therapy--economics--EC; Anoxemia--etiology--ET; Breathing Exercises; Home Nursing; Kyphosis--complications--CO; Oxygen Inhalation Therapy--instrumentation--IS; Pleural Effusion--complications--CO; Pulmonary Fibrosis--therapy--TH; Scoliosis--complications--CO

Record Date Created: 19780321 Record Date Completed: 19780321 ASRC Searcher: Jeanne Horrigan Serial 10/613860

May 3, 2004

```
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200427
File 347: JAPIO Nov 1976-2003/Dec (Updated 040402)
File 371:French Patents 1961-2002/BOPI 200209
Set
        Items Description
S1
                TUBE OR TUBES OR TUBING OR CONDUIT? ? OR TUBUL? OR CATHETE-
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             R? ? OR PIPET??? OR DUCT? ? OR CANNULA? ? OR CHANNEL? ? OR PI-
             PE OR PIPES OR PIPING
S2
                TRAP OR TRAPS OR CONTAINER? ? OR (CONTAINMENT OR DRAINAGE) -
             () (VESSEL? ? OR DEVICE? ?)
               FILTER? ? OR FILTRATION OR VALVE? ?
S3
      1361259
S4
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        32368
S5
                VISCERAL OR WALL OR WALLS
      1105440
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S6
          264
S7
                ATELECTASIS OR MIDDLE()LOBE()SYNDROME OR BRONCHIECTASIS OR
          333
             TRAPPED()AIR(2N)LUNG? ?
S8
           71
                DRAINAGE() COLLECTION
S9
       306994
                OXYGEN OR O2
S10
         8179
                IMPLANTABLE
S11
         6420
                COLLATERAL() VENTILATION OR AIRWAY() RESISTANCE OR EMPHYSEMA?
              OR HYPERINFLAT???(2N)LUNG? ? OR CRICOTHYROID? OR HYPOXIA OR -
             HYPOXEMI? ? OR HYPOXAEMI? ? OR COPD OR CHRONIC()OBSTRUCTIVE()-
             PULMONARY() DISEASE OR CHRONIC() LUNG() DISEASE OR CHRONI...
S12
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                IC=A61M
S13
       100115
                IC=A61M?
S14
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S15
        29387
                S1 AND S2 AND S3
S16
            2
                S15 AND S6
                S1 AND S4 AND S5
S17
          749
S18
           30
                S15 AND S17
S19
                S12 AND S18
            6
S20
            6
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                S1 AND (S4 OR S6) AND (S7 OR S11)
S21
          212
S22
           0
                S15 AND S21
S23
           39
                S12 AND S21
S24
           39
                S23 NOT (S16 OR S20)
S25
           75
                S1(S)(S4 OR S6)(S)(S7 OR S11)
S26
           9
                S24 AND S25
           51
                E3-E8
S27
                S26 NOT S27
S28
           5
S29
          465
                S17/TI
S30
          174
                S12 AND S29
S31
            3
                S2 AND S3 AND S30
S32
            0
                S31 NOT (S26 OR S16 OR S20)
S33
         9925
                IC=A61M-016
S34
                S29 AND S33
           42
                S34 NOT (S16 OR S20 OR S26)
S35
           40
S36
           40
                S35 AND (S6 OR S7 OR S11 OR S4)
S37
           14
                S35 AND (S6/TI OR S7/TI OR S11/TI OR S4/TI)
                S36 NOT S37
S38
           26
               (Item 1 from file: 350)
16/26,TI/1
DIALOG(R) File 350: Derwent WPIX
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009803003
WPI Acc No: 1994-082857/199410
```

Nebulizer for high-humidity oxygen therapy - has hydrophobic finely

porous antibacterial membrane in delivery flow path (Item 2 from file: 350) 16/26,TI/2 DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 004239751 WPI Acc No: 1985-066629/198511 Oxygen supply regulator - has valve between nozzles, contg. channelled piston causing gas pressure formation behind it to secure absolute valve closure 20/26,TI/1 (Item 1 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 015080168 WPI Acc No: 2003-140686/200313 Medical device useful in e.g. vessel comprises an invasive device (ID) and a coating on all or a portion of the device comprising an oxygen liberating substance 20/26,TI/5 (Item 5 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 007152101 WPI Acc No: 1987-152098/198722 Improved blood filter unit reducing gas bubble danger - provided with two highest point gas exits and better positioned blood outlet preventing kinking 20/26,TI/6 (Item 1 from file: 347) DIALOG(R) File 347: JAPIO (c) 2004 JPO & JAPIO. All rts. reserv. 07018341 DOUBLE TANK TYPE BLOOD STORAGE TANK 20/7, K/2(Item 2 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 011663537 **Image available** WPI Acc No: 1998-080446/199808 Medical suction container for expelling body fluid from chest of negative pressure is developed at suction coupling opening side Patent Assignee: HAMA IKA KOGYO KK (HAMA-N) Number of Countries: 001 Number of Patents: 001 Patent Family:

patients - has by-pass pipe with valve which opens when excessive

Patent No Kind Date Applicat No Kind Date 19971209 JP 96157621 JP 9313596 A Α 19960529 199808 B

Priority Applications (No Type Date): JP 96157621 A 19960529

Patent Details:

Patent No Kind Lan Pq Main IPC Filing Notes

JP 9313596 Α 5 A61M-001/00

Abstract (Basic): JP 9313596 A

The container (11) has a water sealing part (19) and a fluid collector part (17) which are divided by a wall partition (15). A tubing part (25) is formed in a suspending partition (27) which is provided in the water sealing part. The fluid collector part is partitioned with a built-up partition (21,23).

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A suction coupling opening (12) provided at the upper part of the fluid collector part and an exhaust coupling opening (13) formed from upper part of the water sealing part are coupled by a by-pass **pipe** (34). The by-pass **pipe** is provided with a **filter** (36) and a **valve** (38). The excessive negative pressure in the suction opening is released by opening of the **valve**.

ADVANTAGE - Releases negative pressure developed in patient's chest. Enables easy and economic manufacturing. Prevents polluted air from entering into fluid collector part side.

Dwg.1/4

Derwent Class: P34

International Patent Class (Main): A61M-001/00

20/7, K/3 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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007444962 **Image available**

WPI Acc No: 1988-078896/198812

Human chest drainage device - has one-way valve between discharge
and inlet chambers, latter having catheter mounted to one wall

Patent Assignee: BAZELL S (BAZE-I); GOLDBERG E M (GOLD-I); BECTON DICKINSON CO (BECT)

Inventor: BAZELL S; GOLDBERG E M

Number of Countries: 014 Number of Patents: 009

Patent Family:

ruc	circ ramitry	•							
Pat	ent No	Kind	Date	App	plicat No	Kind	Date	Week	
EP	260543	Α	19880323	ΕP	87112926	Α	19870904	198812	В
WO	8801879	Α	19880324	WO	86US1886	Α	19860916	198813	
DK	8704838	Α	19880324					198832	
CA	1254468	Α	19890523					198925	
ΕP	323451	Α	19890712	EP	86906070	Α	19860916	198928	
JP	1501521	W	19890601					198928	
ΕP	323451	В	19910828					199135	
DE	3681181	G	19911002					199141	
DK	168786	В	19940613	WO	86US1886	Α	19860916	199427	
				DK	874838	Δ	19870915		

Priority Applications (No Type Date): WO 86US1886 A 19860916; WO 86UUS1886 U 19860916

Cited Patents: EP 137061; GB 2140301; US 3463159; US 4532935 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 260543 A E 17

Designated States (Regional): AT BE CH DE FR GB IT NL SE

WO 8801879 A E

Designated States (National): DK JP

Designated States (Regional): AT BE CH DE FR GB IT LU NL SE

EP 323451 A E

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

EP 323451 B

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

DK 168786 B A61M-001/00 patent DK 8704838

Abstract (Basic): EP 260543 A

A one-way valve (25) is mounted in a housing body (11) and couples an inlet chamber (12) with a discharge chamber (13) so as to prevent the passage of fluid between two chambers except through the valve . The valve has its inlet end in communication with the inlet

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chamber.

The valve has its outlet end in communication with a discharge chamber. The vale is adapted to permit the irreversible passage of drainage material passing through from its inlet end to its outlet end.

USE/ADVANTAGE - A compact, self-contained device for the drainage of a body cavity, such as the ${\it chest}$.

2/12

Abstract (Equivalent): EP 323451 B

Apparatus for drainage of a body cavity, comprising: a housing body having portions (15, 16) defining an inlet chamber (12) and a discharge chamber (13); said housing body portion defining said inlet chamber having mounting means for supporting a catheter in sealed arrangement therewithh and in fluid communication with said inlet chamber; a catheter (20) supported by said mounting means and extending outwardly from said inlet chamber, said catheter being in fluid communication with said inlet chamber; an inlet port (21) in said housing body portion defining said inlet chamber adapted to reversibly receive a trocar (14) and enable at least a portion of a trocar to pass through said inlet chamber and said catheter, said inlet port including sealing means (22); characterised in that said sealing means seals said inlet chamber against the ambient atmosphere in the absence of a trocar, and is adapted upon insertion and upon withdrawal of a trocar from at least said catheter and with respect to said inlet chamber and said inlet port to seal said inlet chamber from the ambient atmosphere; and in that the apparatus further comprises: a one-way valve (25) mounted in said housing body and coupling said inlet chamber with said discharge chamber so as to prevent the passage of fluid between said chambers except through said valve , said valve having its inlet end in communication with said inlet chamber, said valve having its outlet end in communication with said discharge chamber, said valve being adapted to permit the irreversible passage of drainage material passing therethrough from its inlet end to its outlet end; and hydrophobic filter means (33) in communication with the discharge chamber for filtering gaseous fluids from said discharge chamber. (20pp)

Derwent Class: P34

International Patent Class (Main): A61M-001/00

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20/7,K/4 (Item 4 from file: 350)
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DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

007326054

WPI Acc No: 1987-323061/198746

Flexible chest drainage bag - with tube projected downwardly into bag alongside valve to resist folding of bag

Patent Assignee: BABER K R (BABE-I); MATTHEWS H R (MATT-I); SMITHS IND PLC (SMIS)

Inventor: MATTHEWS H R

Number of Countries: 010 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2190355	Α	19871118	GB 8710223	A	19870430	198746	В
DE 3715486	A	19871119	DE 3715486	A,	19870509	198747	
AU 8772905	A	19871119				198802	
FR 2598623	A	19871120				198803	
SE 8701999	A	19871118			•	198805	

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19870501 198840 US 4772278 19880920 US 8744550 Α Α GB 2190355 В 199006 19900207 SE 464170 B 19910318 199114 IL 82425 Α 19911212 199203 C2 19950420 DE 3715486 DE 3715486 Α 19870509 199520

Priority Applications (No Type Date): GB 8612048 A 19860517; GB 8710223 A 19870430

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 4772278 A 5

DE 3715486 C2 5 A61M-001/00

Abstract (Basic): GB 2190355 A

An inlet has a flutter valve (21), with a venting outlet (3) formed by a tube (30). The tube projects downwardly into the bag alongside the flutter valve to its lower end to resist folding of the bag in the region of the valve.

The tube has an open lower end (31) and several apertures (32-34) along opposite sides between the walls of the bag, so that they are not obstructed by the material of the bag. One aperture is located at the top of the bag to allow fluid to be drained from the bag when it is inverted. The external end (36) of the tube has a plastics cage to prevent occlusion of the tube.

USE - Flexible **chest** drainage bag for use where lungs do not completely expand.

1/3

Abstract (Equivalent): DE 3715486 C

The medicinal and surgical **drainage vessel** comprises a bag (1) of flexible material with fluid inlet (2) and vent outlet (3). The outlet consists of a **tubular** component (30) extending inside the bag, where it contains several openings (32-34) in its **wall** at intervals in the lengthwise direction.

The inlet can have a flap **valve** (21), and the **tubular** component can extend along the latter at least to its free end. The component can be open at the bag end, and the openings can be formed by transverse drillings in it. They can be formed in its portion situated between the bag **walls**.

ADVANTAGE - Usable in any position, and reduces risk of outlet blockage by bag walls or flowing fluid.

Dwg.1/3

Abstract (Equivalent): GB 2190355 B

A medico-surgical drainage container having a bag of flexible material with a fluid inlet and an outlet for venting air expelled from the bag on entry of fluid, wherein the fluid inlet has a flutter valve located: internally of the bag that allows fluid to enter the bag and prevents fluid leaving the bag through the inlet, wherein the outlet has a tubular member that projects into the bag to one side of and externally of the flutter valve at least substantiallyy to the lower end of the flutter valve such that the tubular member thereby resists folding of the bag in the region of the flutter valve, and wherein the tubular member has a plurality of apertures internally of the bag at locations along the tubular member such that air can escape from the bag through any one of the apertures via the tubular member and that venting through the tubular member is unimpeded by operation of the flutter valve.

Abstract (Equivalent): US 4772278 A

The bag has an inlet with a flutter valve , and a venting outlet

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formed by a rigid or semi-rigid tube. The tube projects downwardly into the bag alongside the flutter valve to its lower end so as to resist folding of the bag in the region of the valve.

The **tube** has an open lower end and several apertures along its opposite sides between the **walls** of the bag, so that the apertures are not obstructed by the material of the bag. One aperture is located close to the top of the bag to allow fluid to be drained from the bag when the bag is inverted.

USE/ADVANTAGE - A flexible chest drainage bag. The upper end of the tube is external of the bag and is provided with a plastics cage to prevent occlusion of the tube . (5pp)i

Derwent Class: P31; P32; P34; Q32

International Patent Class (Main): A61M-001/00

International Patent Class (Additional): A61B-019/00; A61F-005/44;

A61M-027/00 ; B65D-030/24; B65D-033/01

26/26,TI/3 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015876941

WPI Acc No: 2004-034774/200403

Lung airway wall opening maintaining conduit has springs located towards distal and proximal portions of conduit, where springs expand to secure conduit within opening when inserted into opening

26/26,TI/7 (Item 7 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014551156

WPI Acc No: 2002-371859/200240

Real time patient airway variable estimation method for pressure based ventilator system, involves measuring flow of gas to connecting tube circuit and pressure of gas within tube circuit

26/7,K/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015040784 **Image available**

WPI Acc No: 2003-101300/200309

Pleural cavity drainage apparatus

Patent Assignee: BASHBIOMED SCI PRODN ASSOC CO LTD (BASH-R); FATIKHOV R G (FATI-I); PLECHEV V V (PLEC-I); UNIV BASHKIR MED (UYBA-R)

Inventor: FATIKHOV R G; PLECHEV V V

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
RU 2192185 C1 20021110 RU 2001112402 A 20010504 200309 B

Priority Applications (No Type Date): RU 2001112402 A 20010504

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

RU 2192185 C1 A61B-017/34

Abstract (Basic): RU 2192185 C1

NOVELTY - Apparatus is made in the form of body of rotation comprising cylindrical casing. Pleural end of casing is provided with flexible corrugation and opposite end is provided with restricting cuff and branch <code>pipe</code> for connecting drain <code>pipe</code>. Trocar is made in the

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form of movable axially spring-loaded stilette located in tubular casing, which is provided with annular clamp for securing branch pipe, handle and lever. Free end of corrugation is made so as to be inserted between stillete and casing ends and pinched. Such construction allows wound channel wall to be isolated from penetration of pleural cavity contents and air and, accordingly, development of cutaneous emphysema and chest phlegmon to be prevented.

USE - Medicine.

ADVANTAGE - Increased efficiency and simplified construction. 5 dwg pp; 0 DwgNo 1/1

Derwent Class: P31; P34

International Patent Class (Main): A61B-017/34

International Patent Class (Additional): A61M-025/01; A61M-025/12

26/7,K/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010003648 **Image available**
WPI Acc No: 1994-271359/199433

Method of inserting cricothyroidal endotracheal device - has tube inserted through surgical opening in patient prior to connection to oxygen@ supply

Patent Assignee: BECK C A (BECK-I); SCHER N (SCHE-I)

Inventor: BECK C A; SCHER N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 5339809 A 19940823 US 91802355 A 19911204 199433 B
US 9359187 A 19930506

Priority Applications (No Type Date): US 91802355 A 19911204; US 9359187 A 19930506

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5339809 A 6 A61M-005/178 Cont of application US 91802355 Abstract (Basic): US 5339809 A

The method for providing continuous oxygen therapy to a patient having chronic breathing problems, comprises providing a cricothyroidal endotracheal apparatus including: a first elongated and hollow tube portion formed of semi-rigid material and having an outer diameter between approximately 5 and 9 mm, and less than the inside

To prevent damage to the trachea during insertion a closed distal end tapers downwardly towards the distal end. There are vertically spaced apertures extending away from the distal end. The vertically spaced apertures allow fluid to flow between an interior and an exterior of the first tube portion.

ADVANTAGE - Minimised air leakage.

Dwg.1/4

diameter of the trachea.

Derwent Class: P34

International Patent Class (Main): A61M-005/178

International Patent Class (Additional): A61M-016/00; A61M-025/00

26/7,K/5 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

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Serial 10/613860 May 3, 2004

05147992 05147992 **Image ava CATHETER FOR SUCTION **Image available**

PUB. NO.: 08-103492 [JP 8103492 A] PUBLISHED: April 23, 1996 (19960423)

INVENTOR(s): TAGUMA NORIMASA

APPLICANT(s): TAGUMA NORIMASA [000000] (An Individual), JP (Japan)

APPL. NO.: 06-276919 [JP 94276919] October 05, 1994 (19941005) FILED: ABSTRACT

PURPOSE: To obtain a safe and efficient catheter by providing a suction pipe with a side pipe to be installed in combination therewith, opening both at the front ends and forming a catheter in such a manner that the front end of an intermediate partition wall leaves a gap without arriving at the front end of the catheter and or the front end of the intermediate wall is notched to make the intermediate wall vibratable at the time of use. CONSTITUTION: A negative pressure is generated in a suction pipe cavity 1 and the phleqm, etc., to be sucked are sucked to the front end of the catheter when the suction pipe is connected to a suction pipe and the negative pressure is applied thereon in the case of the shape lacking the intermediate wall 3 of the front end. The effect of this negative pressure acts on the side pipe through the non-closed lacking part according to this suction and, therefore, the air and medicinal liquid in the side pipe cavity 2 are eventually sucked out through the lacking part to the suction pipe cavity 1 side. The sucked out flow simultaneously washes the viscous object, such as phlegm 8, at the front end of the catheter, thus having the effect of making the suction easy and preventing the closing of the lacking part with the object. For example, a danger of forming an atelectasis is averted at the time of sucking the phlegm of the lung.

26/3,IC/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

016046817

WPI Acc No: 2004-204668/200420

XRAM Acc No: C04-080914 XRPX Acc No: N04-162613

Collateral ventilation bypass trap system for removing trapped in emphysematous lungs, comprises at least one conduit having first end connected to containment vessel and second end passing through thoracic wall and lung of patient

Patent Assignee: CORDIS CORP (CRDC); TANAKA D (TANA-I)

Inventor: TANAKA D

Number of Countries: 033 Number of Patents: 003

Patent Family:

Patent No Kind Date Applicat No Kind Date EP 1393760 A1 20040303 EP 2003255306 A 20030827 200420 B US 20040040555 A1 20040304 US 2002406624 P 20020828 200420

US 2003613860 A 20030703

CA 2438823 A1 20040228 CA 2438823 Α 20030828 200421 Priority Applications (No Type Date): US 2003613860 A 20030703; US 2002406624 P 20020828

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes EP 1393760 A1 E 16 A61M-001/00

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

ASRC Searcher: Jeanne Horrigan Serial 10/613860 May 3, 2004 US 20040040555 A1 A61M-016/00 Provisional application US 2002406624 CA 2438823 A1 E A61M-016/00 International Patent Class (Main): A61M-001/00; A61M-016/00 International Patent Class (Additional): A61M-016/10; A61M-016/20 (Item 2 from file: 350) 26/3,IC/2 DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 016000773 WPI Acc No: 2004-158623/200416 XRAM Acc No: C04-063267 XRPX Acc No: N04-126751 Long-term oxygen therapy system for treating hypoxemic patients having chronic obstructive pulmonary disease, includes oxygen supply, valve, conduit , and sealing device that provides fluid tight seal between conduit and thoracic wall Patent Assignee: CORDIS CORP (CRDC); TANAKA D (TANA-I) Inventor: TANAKA D Number of Countries: 033 Number of Patents: 003 Patent Family: Kind Patent No Date Applicat No Kind Date Week EP 1386635 A1 20040204 EP 2003254748 A 20030729 200416 B CA 2436483 A1 20040131 CA 2436483 A 20030731 200416 US 20040024356 A1 20040205 US 2002399907 P 20020731 200416 US 2003613358 A 20030703 Priority Applications (No Type Date): US 2003613358 A 20030703; US 2002399907 P 20020731 Patent Details: Patent No Kind Lan Pq Main IPC Filing Notes A1 E 13 A61M-037/00 Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR CA 2436483 A1 E A61M-016/00 US 20040024356 A1 A61M-029/00 Provisional application US 2002399907 International Patent Class (Main): A61M-016/00 ; A61M-029/00 ; A61M-037/00 International Patent Class (Additional): A61M-031/00 26/3,IC/4 (Item 4 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 015196455 WPI Acc No: 2003-256991/200325 Related WPI Acc No: 2001-183025; 2002-665488; 2002-731244; 2003-090179; 2003-090394; 2003-635036; 2003-877133; 2004-059032; 2004-081957; 2004-118964 XRPX Acc No: N03-203827 Conduit for altering gaseous flow in lung of chronic obstructive pulmonary disease victim has cage structure adjacent conduit second

section passageway
Patent Assignee: BRONCUS TECHNOLOGIES INC (BRON-N)
Inventor: COLE C; ESTRIDGE T; KAPLAN G; LAUFER M D; LOOMAS B; REICH C J;
ROSCHAK E; BIGGS M; CHANDOS D; COLLINSON M; COOPER J D; KARABEY H; KEAST
T; REDMOND R; SAENZ S; TANAKA D; THOMPSON D; VIDAL C
Number of Countries: 100 Number of Patents: 002

end with opening and cage passageway in fluid communication with center

Serial 10/613860 May 3, 2004

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
WO 200320338 A2 20030313 WO 2002US28237 A 20020904 200325 B

US 20040073155 A1 20040415 US 2000176141 P 20000114 200426

US 2000633651 A 20000807 US 2001908177 · A 20010718 US 2001947144 A 20010904

US 2002387163 P 20020607 US 2002235240 A 20020904

US 2002235240 A 20020904 US 2002420440 P 20021021

US 2003458085 A 20030609

Priority Applications (No Type Date): US 2002387163 P 20020607; US 2001317338 P 20010904; US 2001947144 A 20010904; US 2001334642 P 20011129; US 2002367436 P 20020320; US 2002374022 P 20020419; US 2000176141 P 20000114; US 2000633651 A 20000807; US 2001908177 A 20010718; US 2002235240 A 20020904; US 2002420440 P 20021021; US 2003458085 A 20030609 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes WO 200320338 A2 E 99 A61M-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW US 20040073155 A1 A61F-002/04 Provisional application US 2000176141

Cont of application US 2000633651 CIP of application US 2001908177 CIP of application US 2001947144 Provisional application US 2002387163 CIP of application US 2002235240 Provisional application US 2002420440 Cont of patent US 6692494

International Patent Class (Main): A61F-002/04; A61M-000/00 International Patent Class (Additional): A61B-019/00

26/3,IC/6 (Item 6 from file: 350)

DIALOG(R) File 350: Derwent WPIX.

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015029662

WPI Acc No: 2003-090179/200308

Related WPI Acc No: 2001-183025; 2002-665488; 2002-731244; 2003-248441;

2003-256991; 2003-635036; 2003-877133; 2004-081957; 2004-118964

XRAM Acc No: C03-022787 XRPX Acc No: N03-071185

Placing of conduit within lung tissue for treating patient having chronic obstructive pulmonary disease, by feeding guide wire to site within lung, advancing conduit using guide wire and placing within lung tissue

Patent Assignee: BRONCUS TECHNOLOGIES INC (BRON-N)

Inventor: COOPER J D; DAVENPORT J M; KAPLAN G; LOOMAS B; TANAKA D

Number of Countries: 100 Number of Patents: 003

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20020111620 A1 20020815 US 2001269130 P 20010214 200308 B

ASRC Searcher: Jeanne Horrigan Serial 10/613860

May 3, 2004

US 2001947144 A 20010904

WO 200264190 A2 20020822 WO 2002US4610 A 20020214 200308 AU 2002248443 A1 20020828 AU 2002248443 A 20020214 200427 Priority Applications (No Type Date): US 2001269130 P 20010214; US

. 2001947144 A 20010904

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20020111620 A1 57 A61B-018/18 Provisional application US 2001269130 WO 200264190 A2 E A61M-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW U 2002248443 A1 A61M-000/00 Based on patent WO 200264190

International Patent Class (Main): A61B-018/18; A61M-000/00

37/26,TI/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015408654

WPI Acc No: 2003-470794/200345

Device isolating one side of patient's airway for single- lung ventilation during surgery, includes mask, tubing and inflatable collar seal for bronchial stem

37/26,TI/3 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

013750741

WPI Acc No: 2001-234970/200124

Devices, compositions and methods for achieving nonsurgical lung volume reduction

37/26,TI/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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013411112

WPI Acc No: 2000-583050/200055

Valve gear for respiration mask of bellows-type artificial respirator, has valve chest with air inlet and exhaust ports on enclosure wall of mask, and linkage interlocking valves at both ports

37/26,TI/5 (Item 5 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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013192903

WPI Acc No: 2000-364776/200031

Guided tracheal intubation device for facilitating lung ventilation in unconscious patients includes flexible thin tube and bulb mounted at the distal end of the tube

37/26,TI/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012734637

WPI Acc No: 1999-540754/199945

Medical device used as endotracheal, tracheostomy, nasopharyngeal, nasogastric and chest tube, wound drain and catheter

37/26,TI/7 (Item 7 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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011445389

WPI Acc No: 1997-423296/199739

Lung disease treatment apparatus - incorporates respiratory vibrator with conical seat and metal ball

37/26,TI/8 (Item 8 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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011236712

WPI Acc No: 1997-214615/199720

Tracheal tube for use with lung ventilator - has additional inlet in oro-pharynx section for entraining patient's own nitrogen oxide in inspiratory gas flow

37/26,TI/9 (Item 9 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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011098524

WPI Acc No: 1997-076449/199707

Endotracheal appts. for insertion through mouth and into trachea of patient for ventilating one lung and blocking other - comprises cuff manoeuvred into left or right bronchus of patient by sliding and rotating catheter or bronchial blocker into position to occlude selected bronchus

37/26,TI/10 (Item 10 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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010231920

WPI Acc No: 1995-133177/199518

Lung ventilator e.g. for use in resuscitation, rescue breathing and patient transport - has discrete trigger operation to initiate each successive ventilation cycle which is performed by pneumatic or electrically operated mechanisms

37/26,TI/11 (Item 11 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009465132

WPI Acc No: 1993-158668/199319

Administration of liquid surfactant to an infants lung - comprises simultaneous admin. of the surfactant while ventilating lung using breathing tube by feeding in oxygen@-rich airstream

37/26,TI/13 (Item 13 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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ASRC Searcher: Jeanne Horrigan Serial 10/613860 May 3, 2004 002297633 WPI Acc No: 1980-A4065C/198002 Intubation tube for single lung ventilation - has elastic air - and water-proof divider between two ducts 37/26,TI/14 (Item 1 from file: 347) DIALOG(R) File 347: JAPIO (c) 2004 JPO & JAPIO. All rts. reserv. 03832261 TUBE IN TRACHEA FOR VENTILATING ONE SIDE LUNG (Item 2 from file: 350) 37/7, K/2DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 014205839 **Image available** WPI Acc No: 2002-026536/200203 One-way valve and methods for use in bronchus for lung volume reduction has a flutter valve held in an expandable frame and a skirt with radial anchors Patent Assignee: SHAW MEDICAL INVENTIONS LTD (SHAW-N); SHAW D P (SHAW-I) Inventor: SHAW D P Number of Countries: 096 Number of Patents: 005 Patent Family: Patent No Kind Applicat No Date Kind Date Week A 20010518 200203 B WO 200187170 A1 20011122 WO 2001NZ92 AU 200160840 20011126 AU 200160840 Α 20010518 Α 200222 EP 1284663 A1 20030226 EP 2001934679 20010518 200319 Α WO 2001NZ92 A 20010518 US 20030164168 A1 20030904 WO 2001NZ92 A 20010518 200359 US 2003275995 20030407 Α JP 2003533266 W 20031111 JP 2001583641 20010518 200375 Α WO 2001NZ92 ·A 20010518 Priority Applications (No Type Date): NZ 504621 A 20000518 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes WO 200187170 A1 E 23 A61B-017/24 Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW AU 200160840 A A61B-017/24 Based on patent WO 200187170 EP 1284663 A61B-017/24 Based on patent WO 200187170 A1 E Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR US 20030164168 A1 A61M-016/00 JP 2003533266 W 32 A61B-017/00 Based on patent WO 200187170 Abstract (Basic): WO 200187170 A1 NOVELTY - The one-way valve (5) is held in an expandable frame (6) that also carries a skirt (3). The skirt has a series of projections (7) that act as anchors in the bronchial wall. The frame may be

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for

(a) An endoscopic procedure for lung collapse

delivered in the end of an endoscope

(b) An endoscopic method for treatment of pneumothorax

В

ASRC Searcher: Jeanne Horrigan Serial 10/613860

May 3, 2004

- (c) An endoscopic method for producing hypoxic vasoconstriction
- (d) An endoscopic procedure for lung volume reduction including a delivery tube
- (e) An endoscopic procedure for removal of the one-way valve USE - To produce the collapse of part of a lung e.g. in the treatment of tuberculosis or emphysema

ADVANTAGE - The procedure is relatively non-invasive and in-expensive method of treatment giving reduced mortality and morbidity in patients with limited reserves. Thus more seriously ill patients may be treated

DESCRIPTION OF DRAWING(S) - Section through the one-way valve

Skirt (3)

One-way valve (5)

Frame (6)

Anchors (7)

pp; 23 DwgNo 2/16

Derwent Class: P31; P34

International Patent Class (Main): A61B-017/00; A61B-017/24; A61M-016/00 International Patent Class (Additional): A61B-001/267; A61B-001/273

37/7,K/12 (Item 12 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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004640759

WPI Acc No: 1986-144102/198622

Apparatus for bronchial intubation and separate lung ventilation - has tracheal and endo-bronchial tubes with seals to engage walls of internal organs

Patent Assignee: NAZARI S (NAZA-I)

Inventor: NAZARI S

Number of Countries: 012 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No		Kind	Date	Week	
WO 8602845	Α	19860522	WO	85EP600	Α	19851110	198622	
EP 203124	Α	19861203	EP	85905811	A	19851108	198649	
US 4819664	Α	19890411	US	88159426	Α	19880217	198917	
IT 1177217	В	19870826					199033	
IT 1184567	В	19871028					199041	
EP 203124	В	19910605					199123	
DE 3583141	G	19910711					199129	

Priority Applications (No Type Date): IT 8521025 A 19850605; IT 8423603 A 19841115

Cited Patents: CH 541332; EP 64701; FR 1505607; GB 1528279

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 8602845 A E 19

Designated States (National): JP US

Designated States (Regional): AT BE CH DE FR GB IT LU NL SE

EP 203124 A E

Designated States (Regional): DE FR GB

EP 203124 B

Designated States (Regional): DE FR GB

Abstract (Basic): WO 8602845 A

A tube (2) is insertable into the trachea of a patient. At least one endobronchial tube (6a) is insertable into the tracheal tube to reach one of the principal bronchi and define, with the tracheal tube,

Serial 10/613860 May 3, 2004

an air passage. The tubes are connectible to an air supply and carry seals (16,18a) at their inserted ends, engageable with the internal walls of organs into which they are inserted.

Seals (25a) act between the two tubes toward the exterior, to prevent external communication with the air passage. The endobronchial tube and air passage have equal fluid dynamic resistances.

ADVANTAGE - Prevents flooding of lateral bronchus. (19pp Dwg.No.4/8)

Abstract (Equivalent): EP 203124 B

A device for selective bronchial intubation and separate lung fluid media ventilation, comprising an elongated tracheal tube (2) adapted to be inserted into a human trachea and having a forward end, a rearward end and a length sufficient to allow the forward end of said tracheal tube to be positioned in the trachea at a location near the bifurcation of the trachea at a location near the bifurcation of the trachea into right and left main bronchi, said tracheal tube having an inner surface, the inner surface of said tube defining an internal cavity having an internal cavity dia. and extending lengthwise within said tracheal tube, first inflatable sealing means (16) mounted on the outer periphery of said tracheal tube near the forward end thereof, said first inflatable sealing means being adapted upon inflation sealing means being adapted upon inflation thereof to expand into substantial sealing contact with the inner surface of the trachea near the bifurcation thereof, an endobronchial tube (6a,6b) defining a first lumen for the fluid passage therethrough and having an external dia. which is smaller than said internal cavity dia., said endobronchial tube being adapted to be inserted into said internal cavity of said tracheal tube (2) for longitudinal sliding movement therein thereby defining in said internal cavity between the external periphery of said endobronchial tube and the internal periphery of the tracheal tube a second lumen (7) for the flow of fluid media therethrough, said endobronchial tube (6a,6b) having a forward extremity portion with a forward tip (13a,13b) and upon insertion into said tracheal tube extending beyond said forward end of said tracheal tube (2) outside thereof, a second inflatable sealing means (18a,18b) on said forward extremity portion, said second inflatable sealing means being adapted upon inflation

Abstract (Equivalent): US 4819664 A

The device comprises a tracheal tube insertable into the trachea of a patient, and an endobronchial tube, of greater length than the tracheal tube and being insertable into the tracheal tube for reaching, with one of its extremities, one of the principal bronchi. In this way the endobronchial tubes defines in cooperation with the tracheal tube a single air passage.

At their external ends, the tubes are connectable to an air supply and at their internal ends are provided with sealing members which can be actuated to form a seal with the internal walls of the organs where the tubes are inserted. There are also provided stoppers adapted to act between the two tubes, towards the exterior, to prevent external communication with the air passage.

ADVANTAGE - The air passage and the endobronchial tube have substantially equal fluid-dynamic resistances to obtain uniform ventilation of both lungs. (7pp)

Derwent Class: P31; P34

International Patent Class (Additional): A61B-000/00; A61M-015/00;
 A61M-016/00 ; A61M-029/00

ASRC Searcher: Jeanne Horrigan

Serial 10/613860 May 3, 2004

38/26,TI/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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016066346

WPI Acc No: 2004-224197/200421

Improved drug delivery to patient's respiratory system comprises using aerosol delivery apparatus comprising medication dispenser with adapter having two coaxial tubes and inner coaxial tube in center of outer coaxial tube

38/26,TI/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015949280

WPI Acc No: 2004-107121/200411

Delivering aerosolized medication to respiratory system comprises intubating patient with endotracheal tube having main tube, main lumen, wall, and primary cannulation

38/26,TI/3 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015522840

WPI Acc No: 2003-584987/200355

Dry powder inhaler for delivery of medicament to respiratory tract, comprises circulation chamber, first supply channel, second air supply channels, discharge channel, and third air supply channel

38/26,TI/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015474167

WPI Acc No: 2003-536313/200351

Tube for trachea, consists of main body having two lumens with openings, tube length controller for adjusting tube protrusion in end, cuff on end of main body and cuff at tube protrusion partition wall

38/26,TI/6 (Item 6 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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013640202

WPI Acc No: 2001-124410/200114

Valve for compressed gas breathing appliance uses frusto-conical moving piston with air gap from cylinder wall and opening and closing the breathing gas supply controlled by lungs

38/26, TI/7 (Item 7 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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013203281

WPI Acc No: 2000-375154/200032

Respiratory assisting device for removal of fluid from lungs, has tubular air passages connecting mouthpiece and coupling chamber, through which audio signals and medical agent are applied

ASRC Searcher: Jeanne Horrigan Serial 10/613860 May 3, 2004 38/26,TI/8 (Item 8 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 012773995 WPI Acc No: 1999-580222/199949 Endotracheal tube for bronchial occlusion for use in medical and surgical procedure 38/26,TI/9 (Item 9 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 012590271 WPI Acc No: 1999-396377/199934 Low pressure medical trachea tube with reduced risk of infection by secretions 38/26,TI/10 (Item 10 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 012166459 WPI Acc No: 1998-583371/199849 Vibrating respirator for loosening phlegm and like in patient's lungs has hollow housing with holed cap attached to breathing tube and base accommodating pulsed audio signal generator connected to loudspeaker. 38/26,TI/11 (Item 11 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 012104073 WPI Acc No: 1998-520985/199844 Endotracheal tube for ventilation of lungs - has incomplete posterior bevel extending toward, but not completely through. the anterior wall and a curved lip projecting inward of anterior wall (Item 12 from file: 350) 38/26,TI/12 DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 010681987 WPI Acc No: 1996-178942/199618 Ventilation tube with evacuation sheath - has balloon cuff and evacuation device, and membrane positioned radially about ventilation tube 38/26,TI/13 (Item 13 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 010669404 WPI Acc No: 1996-166358/199617 Artificial tube of trachea for respiration - is made up of non collapsible and flexible nature material which is inserted between

bronchial tubes of trachea

38/26,TI/14 (Item 14 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
010482767

WPI Acc No: 1995-384087/199550

ASRC Searcher: Jeanne Horrigan Serial 10/613860 May 3, 2004

Therapy appliance for supporting breathing and expectoration of patient - produces oscillating air resistance using mouthpiece, hose, tube and interfitting recesses and protuberances

38/26,TI/15 (Item 15 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010204453

WPI Acc No: 1995-105707/199514

Endotracheal tube set for anaesthesia - has two lumens connected to machine by connector having outer element with pair of passages connected to tubes

38/26,TI/16 (Item 16 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010159575

WPI Acc No: 1995-060828/199508

Endotrachaeal tube with drug delivery lumen in wall - ending at proximal end of Murphy eye to split into streams passing to both lungs

38/26,TI/17 (Item 17 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009748130

WPI Acc No: 1994-027981/199404

Laryngeal mask with reflectance oximeter - has oximeter mounted to proximal side of laryngeal mask to face posterior wall of pharynx when mask forms sealed airway with laryngeal inlet

38/26,TI/18 (Item 18 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009700360

WPI Acc No: 1993-393913/199349

Endotracheal tube for breathing of patient during lungs operation - has longitudinal channel in tube wall, where wire with round cross-section is situated

38/26,TI/19 (Item 19 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009465395

WPI Acc No: 1993-158932/199319

Medical tube with injection lumen in wall - has one-way valves formed by angled slits through lumen wall to exterior

38/26,TI/20 (Item 20 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009288078

WPI Acc No: 1992-415489/199250

Nasal cannula partic. for oxygen@ supply - in which distal end is folded back to form frusto-conical skirt sealing on nostril

38/26,TI/21 (Item 21 from file: 350)

ASRC Searcher: Jeanne Horrigan . Serial 10/613860 May 3, 2004 DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 007498558 WPI Acc No: 1988-132491/198819 Endotracheal tube allowing medication delivery to lining of lungs - has ejection ring located at distal annular surface of hollow tube 38/26,TI/22 (Item 22 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 007087632 WPI Acc No: 1987-087629/198713 Tracheal tube for administering medication to lungs - with internal passages and axial ports, also bead at remote end 38/26,TI/23 (Item 23 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 004043174 WPI Acc No: 1984-188716/198430 Trachea cannula insertable through neck hole of patient - has box-like receptacle with breathing hole attached to open outer end of inner tube removably slidable in curved outer tube 38/26,TI/24 (Item 24 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 003237404 WPI Acc No: 1982-A0514J/198247 Endotracheal tube with movable endo-bronchial obturator - has tube cuff with small side channel for extendable catheter 38/26,TI/25 (Item 25 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 003029798 WPI Acc No: 1981-C9812D/198114 Artificial breathing device with open air duct - has regulating valve manually adjusted to required gas quantity and with outlet connected to duct by small bore tube 38/26,TI/26 (Item 1 from file: 347) DIALOG(R) File 347: JAPIO (c) 2004 JPO & JAPIO. All rts. reserv. 02779274 TRACHEAL TUBE HAVING DOUBLE CUFF (Item 5 from file: 350) 38/7,K/5 DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 015380179 **Image available**

WPI Acc No: 2003-441120/200341

Flow control device for bronchial passageway comprises valve to regulate

fluid flow through device, seal extending radially outward and forming

seal with interior wall of bronchial passageway, and anchor

Patent Assignee: BARRETT M S (BARR-I); FIELDS A J (FIEL-I); GIFFORD H S

ASRC Searcher: Jeanne Horrigan Serial 10/613860

(GIFF-I); HENDRICKSEN M J (HEND-I); HUNDERTMARK R (HUND-I); MCCUTCHEON J G (MCCU-I); RAPACKI A R (RAPA-I); SUTTON D (SUTT-I); THOLFSEN D R

(THOL-I); WILSON P M (WILS-I); EMPHASIS MEDICAL INC (EMPH-N)

Inventor: BARRETT M S; FIELDS A J; GIFFORD H S; HENDRICKSEN M J;
HUNDERTMARK R; MCCUTCHEON J G; RAPACKI A R; SUTTON D; THOLFSEN D R;
WILSON P M

Number of Countries: 101 Number of Patents: 002

Patent Family:

May 3, 2004

Patent No Kind Date Applicat No Kind Date Week WO 200330975 A2 20030417 WO 2002US32853 A 20021010 200341 B US 20030070682 A1 20030417 US 2001329249 P 20011011 200341

US 2001350106 P 20011019 US 2001338508 P 20011105 US 2002351084 P 20020122 US 2002371634 Р 20020409 US 2002384247 Ρ 20020528 US 2002270792 Α 20021010

Priority Applications (No Type Date): US 2002384247 P 20020528; US 2001329249 P 20011011; US 2001350106 P 20011019; US 2001338508 P 20011105; US 2002351084 P 20020122; US 2002371634 P 20020409; US 2002270792 A 20021010

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes WO 200330975 A2 E 163 A61M-016/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW US 20030070682 A1 A62B-009/06 Provisional application US 2001329249

Provisional application US 2001350106 Provisional application US 2001338508 Provisional application US 2002351084 Provisional application US 2002371634 Provisional application US 2002384247

Abstract (Basic): WO 200330975 A2

NOVELTY - Flow control device comprises a **valve** (612) to regulate fluid flow through the device, a **seal** (615) extending radially outward and forming a seal with the interior wall of a bronchial passageway when the flow control device is implanted in the passageway, and an anchor exerting a radial force against the interior wall when the device is implanted in the bronchial passageway.

DETAILED DESCRIPTION - Flow control device comprises a valve (612) to regulate fluid flow through the device, a seal (615) that at least partially surrounds the valve and which extends radially outward and forms a seal with the interior wall of the bronchial passageway when the flow control device is implanted in the bronchial passageway, and an anchor which is secured to the seal, exerts a radial force against the interior wall of the bronchial passageway when the flow control device is implanted in the bronchial passageway, and retains the flow control device in a fixed location in the bronchial passageway.

INDEPENDENT CLAIMS are also included for:

(a) a system for delivering a flow control device into a bronchial passageway, which comprises a catheter sized to be deployed to a target

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location of a bronchial passageway through a trachea, a housing at or near the distal end of the catheter and defining an interior cavity that is sized to at least partially receive the flow control device, an ejection member movably positioned in the housing, and an actuation member attached to the catheter and mechanically coupled to the ejection member so that the actuation member can be actuated to cause the ejection member to move within the housing and eject a flow control device from the housing;

- (b) a system for loading a flow control device onto a delivery catheter, which comprises a loader device having a loading tunnel sized to receive the flow control device, and a piston that slidably fits within the loading tunnel; and
- (c) deploying a flow control device in a bronchial passageway, which comprises identifying a target location in a bronchial passageway to which the flow control device is deployed, positioning a delivery catheter having a flow control device loaded in it within the bronchial passageway so that the housing is positioned at the target location in the bronchial passageway and ejecting the flow control device from the housing to deploy the flow control device in the bronchial passageway.

USE - The flow control device is used in a bronchial passageway for regulating fluid flow to and from a region of a patient's lung. It is used in performing pulmonary procedures, particularly for treating lung diseases, e.g. chronic obstructive pulmonary disease.

ADVANTAGE - The flow control device provides for a desired fluid flow dynamic to a lung region during respiration and/or induces collapse in at least one lung region.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of a flow control device that can be implanted in a body passageway.

Valve (612) Seal (615) Flanges (620) Cuff (622) pp; 163 DwgNo 5A/64

Derwent Class: A96; B07; P34

International Patent Class (Main): A61M-016/00; A62B-009/06

ASRC Searcher: Jeanne Horrigan Serial 10/613860 May 3, 2004 File 348: EUROPEAN PATENTS 1978-2004/Apr W04 File 349:PCT FULLTEXT 1979-2002/UB=20040415,UT=20040408 Set Items Description S1 756384 TUBE OR TUBES OR TUBING OR CONDUIT? ? OR TUBUL? OR CATHETE-R? ? OR PIPET??? OR DUCT? ? OR CANNULA? ? OR CHANNEL? ? OR PI-PE OR PIPES OR PIPING S2 232998 TRAP OR TRAPS OR CONTAINER? ? OR (CONTAINMENT OR DRAINAGE) -() (VESSEL? ? OR DEVICE? ?) S3 516852 FILTER? ? OR FILTRATION OR VALVE? ? S4 . 71308 CHEST OR THORACIC OR LUNG S5 415125 VISCERAL OR WALL OR WALLS S6 497 (PULMONARY OR LUNG OR OXYGEN OR 02) (1W) THERAPY S7 1025 ATELECTASIS OR MIDDLE()LOBE()SYNDROME OR BRONCHIECTASIS OR TRAPPED()AIR(2N)LUNG? ? S8 57 DRAINAGE() COLLECTION S9 201049 OXYGEN OR O2 S10 12857 IMPLANTABLE COLLATERAL () VENTILATION OR AIRWAY () RESISTANCE OR EMPHYSEMA? S11 12110 OR HYPERINFLAT??? (2N) LUNG? ? OR CRICOTHYROID? OR HYPOXIA OR -HYPOXEMI? ? OR HYPOXAEMI? ? OR COPD OR CHRONIC()OBSTRUCTIVE()-PULMONARY() DISEASE OR CHRONIC() LUNG() DISEASE OR CHRONI... S12 32556 IC=A61M 1793 S1(S)S2(S)S3/TI,AB S13 S14 62 S13 AND (S4 OR S6 OR S7 OR S11) S15 7 S13(S)(S4 OR S6 OR S7 OR S11) 9705 S16 S1(S)(S4 OR S6 OR S7 OR S11) S17 548 S4 (5N) S5 (S) S16 S17/TI, DE, AB S18 8 8 S18 NOT S15 S19 S20 2 S13 AND S6 S21 0 S20 NOT (S15 OR S18) 120 S1(S)S6 S22 S22 (S) S4 (S) S5 S23 16 S24 15 S23 NOT (S15 OR S18) [1 duplicate; 14 not relevant] S25 50 S22 AND S12 S26 61 S22(S)S4 S27 14 S26 AND S12 S28 12 S27 NOT (S15 OR S18 OR S23) S29 17 COLLATERAL () VENTILATION S30 15 S29 NOT (S15 OR S18 OR S23 OR S27) 15/6/2 (Item 2 from file: 348) 01220747 Vacuum adjustment valve 15/6/7 (Item 4 from file: 349) **Image available** NEBULIZER APPARATUS FOR HIGH-HUMIDITY OXYGEN THERAPY 15/3,AB,K/3 (Item 3 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS (c) 2004 European Patent Office. All rts. reserv. 01138619

Disposable thoracic drainage device connectable to an aspiration unit

Thorax-Drainage

anschliessbar

an eine

Einwegvorrichtung fur eine

Saugeinheit

ASRC Searcher: Jeanne Horrigan Serial 10/613860 May 3, 2004

Dispositif de drainage thoracique jetable, raccordable a une unite de succion

PATENT ASSIGNEE:

Gibertoni, Lucio, (2861080), Via Curtatone 41, 41037 Mirandola (Modena), (IT), (Applicant designated States: all)

INVENTOR:

Gibertoni, Lucio, Via Curtatone 41, 41037 Mirandola (Modena), (IT) LEGAL REPRESENTATIVE:

Modiano, Guido, Dr.-Ing. et al (40782), Modiano & Associati SpA Via Meravigli, 16, 20123 Milano, (IT)

PATENT (CC, No, Kind, Date): EP 993833 A2 000419 (Basic)

EP 993833 A3 001018

APPLICATION (CC, No, Date): EP 99119937 991011;

PRIORITY (CC, No, Date): IT 98MI2213 981014

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI INTERNATIONAL PATENT CLASS: A61M-001/00; A61M-027/00 ABSTRACT EP 993833 A2

A disposable thoracic drainage device connectable to an aspiration unit, comprising a container body (1) internally forming at least one chamber for collecting the drainage liquid which is connected to an inlet (50) for connection to a patient and to a water-head suction adjustment valve (10). The water-head suction adjustment valve (10) has a first water head section (20) and a second water head section (28) which are side by side and mutually series-connected by a connecting duct (26).

ABSTRACT WORD COUNT: 80

NOTE: Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS A (English) 200016 515 SPEC A (English) 200016 1347

Total word count - document A 1862
Total word count - document B 0
Total word count - documents A + B 1862

19/6/1 (Item 1 from file: 348) 00599050

Flexible endoscopic surgical port

19/6/7 (Item 5 from file: 349)

00342596 **Image available**

METHOD AND APPARATUS FOR TREATING EDEMA AND OTHER SWELLING DISORDERS

19/6/8 (Item 6 from file: 349) 00309375

AN INTRATHORACIC MECHANICAL, ELECTRICAL AND TEMPERATURE ADJUNCT TO CARDIOPULMONARY CEREBRAL RESUSCITATION, SHOCK, HEAD INJURY, HYPOTHERMIA AND HYPERTHERMIA

19/3,AB,K/6 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00437414

ASRC Searcher: Jeanne Horrigan

Serial 10/613860 May 3, 2004

A-PROSTHESIS FOR THORACOSTOMY AND METHOD FOR ITS IMPLANTATION PROTHESE POUR THORACOSTOMIE ET PROCEDE D'IMPLANTATION DE LADITE PROTHESE

Patent Applicant/Assignee:

FUNDACAO E J ZERBINI,

TARCISIO BRITO FILOMENO Luiz,

TAEKO TANAKA OYAMA Helena,

JUNKO SHIOTSU MAIZATO Marina,

Inventor(s):

TARCISIO BRITO FILOMENO Luiz,

TAEKO TANAKA OYAMA Helena,

JUNKO SHIOTSU MAIZATO Marina,

Patent and Priority Information (Country, Number, Date):

Patent:

WO 9827878 A1 19980702

Application:

WO 96BR70 19961220 (PCT/WO BR9600070)

Priority Application: WO 96BR70 19961220

Designated States: JP US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English Fulltext Word Count: 3307

English Abstract

A Prosthesis for thoracostomy and method for its implantation, said prosthesis comprising a tubular body (10) preferably made of silicone, to be introduced in an opening made in the thoracic cage of a patient. An end of the tubular body (10) incorporates an edge portion (11) to be seated internally to the wall of the thoracic cage, the tubular body (10) being provided along its length with a plurality of external superficial accidents (12), axially and equally spaced relative to each other, and between which is relatively fixed and axially retained a retaining means (20) which is externally seated onto the wall of the thoracic cage.

28/6/1 (Item 1 from file: 348)

00828179

PNEUMATICALLY-OPERATED GAS DEMAND APPARATUS

28/6/5 (Item 2 from file: 349)

00957738 **Image available**

IMPROVED METHOD OF MAINTAINING CONSTANT ARTERIAL PCO"sub"2 DURING INCREASED MINUTE VENTILATION AND MEASUREMENT OF ANATOMIC AND ALVEOLAR DEAD SPACE

28/6/6 (Item 3 from file: 349)

00788004 **Image available**

SUPPLY VALVE AND DIAPHRAGM FOR A PNEUMATICALLY-OPERATED GAS DEMAND APPARATUS

28/6/7 (Item 4 from file: 349)

00788002 **Image available**

PNEUMATICALLY-OPERATED GAS DEMAND APPARATUS

28/6/8 (Item 5 from file: 349)

00435200 **Image available**

METHOD AND APPARATUS FOR PROVIDING VENTILATORY SUPPORT TO A PATIENT

28/6/9 (Item 6 from file: 349)

00416940 **Image available**

VENTILATOR SYSTEM

ASRC Searcher: Jeanne Horrigan Serial 10/613860

May 3, 2004

28/6/10 (Item 7 from file: 349)

00357822

PNEUMATICALLY-OPERATED GAS DEMAND APPARATUS

28/3,AB,K/2 (Item 2 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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00333851

TRANSTRACHEAL CATHETER SYSTEM.

TRANSTRACHEALES KATHETERSYSTEM.

SYSTEME DE CATHETER TRANSTRACHEAL.

PATENT ASSIGNEE:

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AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE)

CHRISTOPHER, Kent L., (781980), 9086 E. Colorado Circle, Denver, CO 80231, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE) INVENTOR:

SPOFFORD, Bryan T., 1470 S. Quebec Way, No. 227, Denver, CO 80231, (US) CHRISTOPHER, Kent L., 9086 E. Colorado Circle, Denver, CO 80231, (US) LEGAL REPRESENTATIVE:

Sommerville, John Henry et al (36131), SOMMERVILLE & RUSHTON 11 Holywell Hill, St. Albans Hertfordshire, AL1 1EZ, (GB)

PATENT (CC, No, Kind, Date): EP 381698 A1 900816 (Basic)

EP 381698 A1 910130

EP 381698 B1 940209

WO 8902761 890406

APPLICATION (CC, No, Date): EP 88909441 880926; WO 88US3335 880926

PRIORITY (CC, No, Date): US 101172 870928

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61M-016/00

NOTE: No A-document published by EPO

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS B (English) EPBBF1 1459 CLAIMS B (German) EPBBF1 CLAIMS B (French) EPBBF1 1498 SPEC B (English) EPBBF1 10326 Total word count - document A Total word count - document B 14626 Total word count - documents A + B 14626 INTERNATIONAL PATENT CLASS: A61M-016/00

...SPECIFICATION B1

This invention pertains to a system for supplemental transtracheal oxygen therapy including transtracheal catheter devices for providing transtracheal, oxygen delivery for spontaneously breathing patients with chronic lung disease and to methods for catheter placement and use. Such devices are medically desirable therapy for patients having a chronic need for oxygen where a catheter can be installed on an out-patient basis for permanent use.

As a result of...

28/3,AB,K/3 (Item 3 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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ASRC Searcher: Jeanne Horrigan Serial 10/613860 May 3, 2004

00195778

TRANSTRACHEAL CATHETER SYSTEM.

TRANSTRACHEALKATHETERANORDNUNG.

CATHETER TRANSTRACHEAL.

PATENT ASSIGNEE:

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AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE)

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CHRISTOPHER, Kent L., (781980), 9086 E. Colorado Circle, Denver, CO 80231 , (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE) **INVENTOR:**

SPOFFORD, Bryan T., 1470 S. Quebec Way, No. 227, Denver, CO 80231, (US) CHRISTOPHER, Kent L., 9086 E. Colorado Circle, Denver, CO 80231, (US) LEGAL REPRESENTATIVE:

Sommerville, John Henry et al (36131), SOMMERVILLE & RUSHTON 11 Holywell Hill, St. Albans Hertfordshire, AL1 1EZ, (GB)

PATENT (CC, No, Kind, Date): EP 207099 A1 870107 (Basic) EP 207099 A1 870311

EP 207099 B1 910724

WO 8603127 860605

APPLICATION (CC, No, Date): EP 85906119 851119; WO 85US2282 851119 PRIORITY (CC, No, Date): US 673912 841121; US 788817 851018 DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE INTERNATIONAL PATENT CLASS: A61M-016/00

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LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language · Update Word Count CLAIMS B (English) EPBBF1 635 (German) EPBBF1 CLAIMS B 605 CLAIMS B (French) EPBBF1 635 SPEC B (English) EPBBF1 8769 Total word count - document A Total word count - document B Total word count - documents A + B ...SPECIFICATION Background of the Invention

Technical Field:

This invention pertains to a system for supplemental transtracheal therapy including transtracheal catheter devices for providing transtracheal oxygen to spontaneously breathing patients with chronic lung disease. Such devices are medically desirable therapy for patients having a chronic need for oxygen where a catheter can be installed on a semi-permanent out patient basis.

As a result of studies...

...a patient who is not breathing spontaneously and are not intended for the long-term oxygen supplementation therapy for chronic lung disease. Typically, such devices are installed by puncturing the skin to create a hole through the cricoid thyroid membrane above the trachea through which a relatively large curved tracheotomy tube is inserted. As previously described, the use of such tubes has been restricted medically to emergency situations where the patient would otherwise suffocate due to the blockage of the airway. Such emergency tracheotomy tubes are not intended for long-term oxygen supplementation therapy

ASRC Searcher: Jeanne Horrigan Serial 10/613860

May 3, 2004

after the airway blockage is removed.

Other devices which have been found satisfactory for emergency...

30/6/1 (Item 1 from file: 348)

01710246

Methods and devices for creating collateral channels in the lungs

30/6/2 (Item 2 from file: 348)

01349406

Methods and devices for creating collateral channels in the lungs

30/6/3 (Item 3 from file: 348)

01266055

METHODS AND DEVICES FOR CREATING COLLATERAL CHANNELS IN THE LUNGS

30/6/4 (Item 1 from file: 349)

01075360 **Image available**

METHOD AND DEVICES FOR MAINTAINING PATENCY OF SURGICALLY CREATED CHANNELS IN TISSUE

30/6/5 (Item 2 from file: 349)

01068825 **Image available**

CONDUITS FOR MAINTAINING OPENINGS IN TISSUE

30/6/6 (Item 3 from file: 349)

01060498

DEVICES FOR MAINTAINING SURGICALLY CREATED OPENINGS

30/6/11 (Item 8 from file: 349)

00992056 **Image available**

CONDUITS HAVING DISTAL CAGE STRUCTURE FOR MAINTAINING COLLATERAL CHANNELS IN TISSUE AND RELATED METHODS

30/6/12 (Item 9 from file: 349)

00937677 **Image available**

DEVICES FOR CREATING COLLATERAL CHANNELS

30/6/13 (Item 10 from file: 349)

00931844 **Image available**

DEVICES FOR CREATING COLLATERAL CHANNELS

30/6/14 (Item 11 from file: 349)

00930374 **Image available**

DEVICES FOR CREATING COLLATERAL CHANNELS

30/6/15 (Item 12 from file: 349)

00778406

METHODS AND DEVICES FOR CREATING COLLATERAL CHANNELS IN THE LUNGS.

30/3, AB, K/7 (Item 4 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

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01047591

METHODS AND DEVICES FOR INDUCING COLLAPSE IN LUNG REGIONS FED BY COLLATERAL PATHWAYS

ASRC Searcher: Jeanne Horrigan

Serial 10/613860 May 3, 2004

METHODES ET DISPOSITIFS SERVANT A PRODUIRE UN AFFAISSEMENT DANS-DES REGIONS DES POUMONS ALIMENTEES PAR DES VOIES COLLATERALES

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Patent:

WO 200375796 A2 20030918 (WO 0375796)

Application:

WO 2003US7230 20030306 (PCT/WO US0307230)

Priority Application: US 2002363328 20020308

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Related by Continuation to: US 2002363328 20020308 (CIP)

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR

- (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
- (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
- (EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

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Fulltext Word Count: 15938

English Abstract

Fulltext Availability: Detailed Description

Detailed Description

... gas and a helium detector, is disclosed in the literature. See, Morrell NW, et al. **Collateral Ventilation** and Gas Exchange in Emphysema, Am J Respir Crit Care Med 1994;150:635...